THE COTTON GIN AND OIL MILL

PRESS

FORMERLY THE COTTON AND COTTON OIL PRESS

JUNE 10, 1950

51st YEAR

THE MAGAZINE OF THE COTTON GINNING AND PROCESSING INDUSTRIES

Division of Cotton Marketing (AMS) Branch Library Agricultural Mktg. Service U S Dept of Agriculture Washington D C

LIBRARY
CURRENT SERIAL RECORD
JUN 20 1950
U. S. DEPARTMENT OF AGRICULTURE

IN OKLAHOMA—COTTON HITS THE COMEBACK TRAIL

Ginners and Crushers Active in Fight to Bring Cotton Back

Super-jet Cleaner

Lint Cleaning With Air

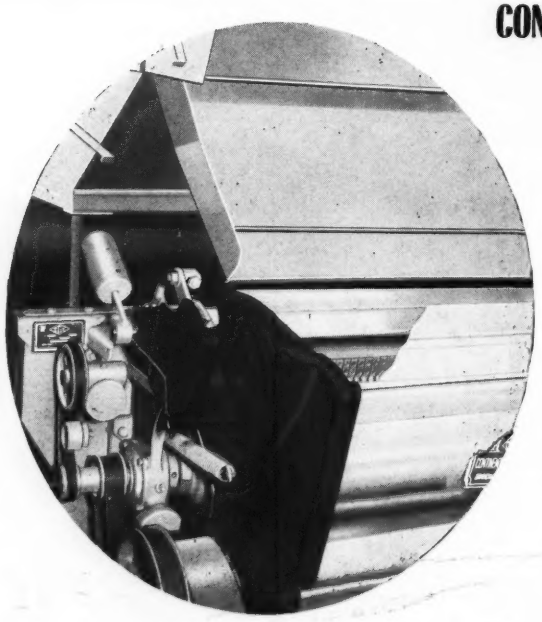
Let us install this amazing piece of equipment behind your present gin stands.

- ***NO Lint Loss***
- ***NO Moving Parts***
- ***NO Excavation***
- ***NO Extra Supervision***

Lummus is doing more to put gins on a paying basis.

LUMMUS COTTON GIN CO.

Dallas, Texas **Columbus, Ga.** **Memphis, Tenn.**



CONTINENTAL'S IMPROVED ROLL DENSITY INDICATOR

- ***Eliminates Guesswork***
- ***Insures Uniform Feed to Gins***

This combination of Roll Density Indicator and Automatic Control automatically controls the feed of cotton into the gins. It tells at a glance the exact density within the roll. The result: Automatic prevention of overfeeding, savings in ginner's time, increased output, better staple and preservation of the natural quality characteristics in the cotton fibre.

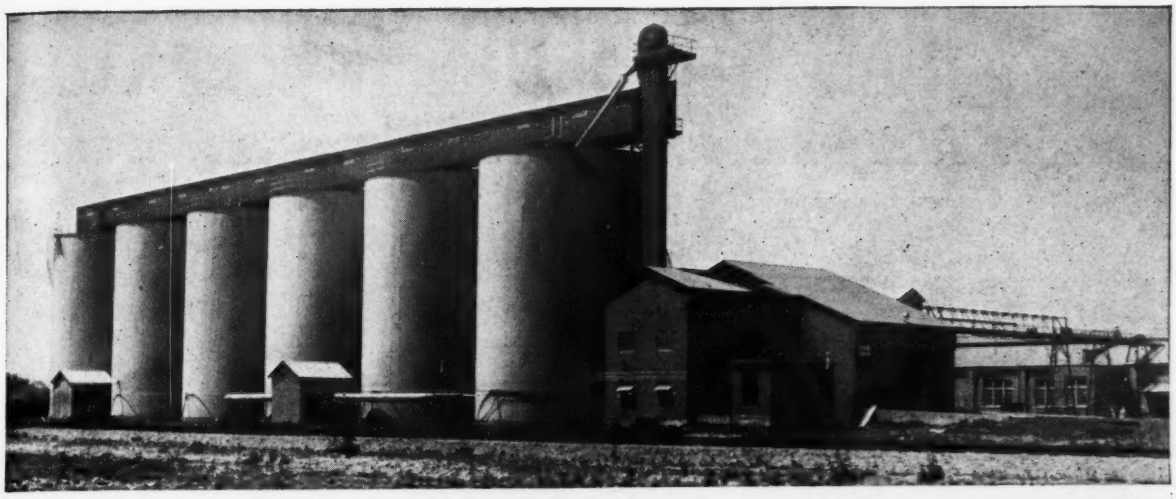
Continental invites you to write for Bulletin 179-A, which gives a complete description of this outstanding aid to better ginning.

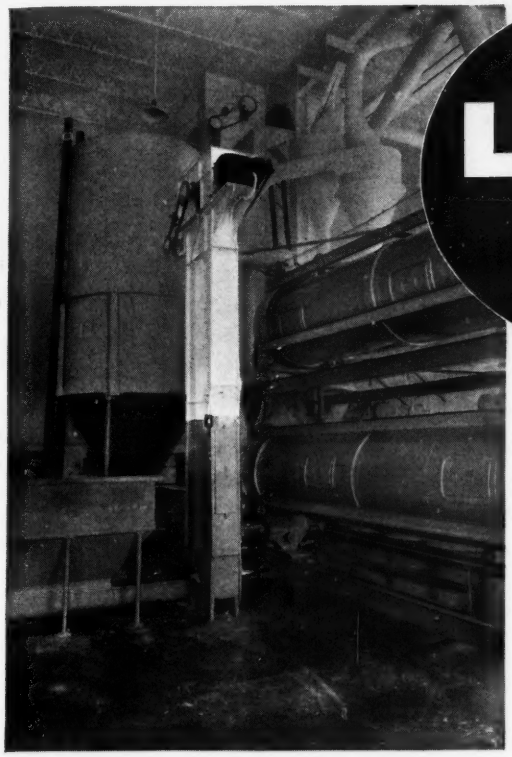
CONTINENTAL GIN COMPANY

BIRMINGHAM, ALABAMA

ATLANTA • *DALLAS* • *MEMPHIS*

Entered as second-class matter February 4, 1905, at the Post Office at Dallas, Texas, Under Act of Congress of March 3, 1897





For a High or Short Lift

LINK-BELT
BUCKET ELEVATORS
Are Built To Do The Job!

Under a wide variety of service conditions, Link-Belt Bucket Elevators are making records for efficiency and economy.

For many years Link-Belt has been designing and building standardized bucket elevators. In this line is included the high-speed, high capacity bucket elevator, with HS buckets, developed especially for handling grain and similar materials.

Sizes of these bucket elevators range from a single row of 4″ x 3″ buckets with a capacity of 410 bu. per hour, to a double row of 24″ x 7″ buckets with a capacity of 35,000 bu. per hour.

Head pulleys are rubber lagged. Casings provide ample clearance and streamlined hood affords smooth discharge. Air turbulence is held to a minimum—for greater sanitation and efficiency. If your needs call for a bucket elevator—specify Link-Belt.

11,770-A

Top illustration shows 90-ft. bucket elevator at a milling plant which discharges to belt conveyor for distribution to storage tanks. Lower installation shows bucket elevator handling flour from barrel dump to sterilizer cylinders.

Link-Belt makes elevating and conveying machinery of all types. There is no obligation in discussing your needs with Link-Belt engineers.

LINK-BELT COMPANY

Atlanta, Dallas 1, New Orleans 12, St. Louis 1, Charlotte 2, N. C., Baltimore 18, Birmingham 3, Houston 1, Jacksonville 2. Distributors Throughout the South.

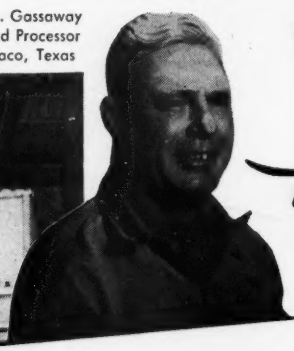
LINK-BELT

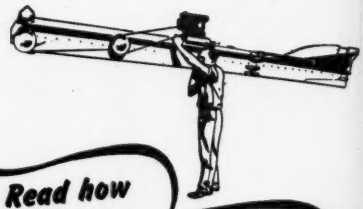
BUCKET ELEVATORS

portable HARVEST-HANDLER ELEVATOR

moves fuzzy cotton seed quickly, economically

J. L. Gassaway
Seed Processor
Waco, Texas





Read how we do it down Waco way!

The Belt Corporation
7378 Stahl Road
Orient, Ohio

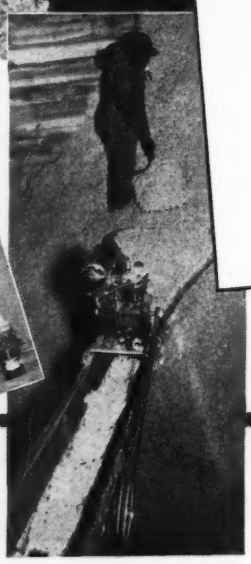
Gentlemen:

In the past few months we have culled and ceresan treated more than 36,000 bushels of fuzzy cotton seed for the Lankart Seed Farms, Waco, Texas. Your Harvest-Handler elevator really does a job moving 600 to 1,000 bushels of cotton seed per hour. Works fine, too, handling grain and beans. Its extra light weight makes it easy to move into the various operating positions.

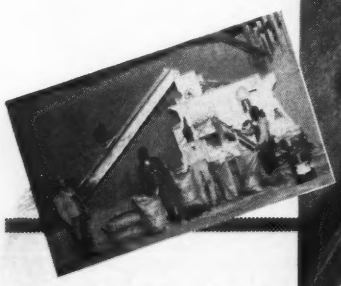
Personally, I consider the Harvest-Handler a real contribution to farming and of real value to farmers interested in saving a lot of time and labor costs.

Yours truly,

J. L. Gassaway



Interior views of the seed house, Lankart Seed Farms, Waco, Texas. Note Harvest-Handler in operation.



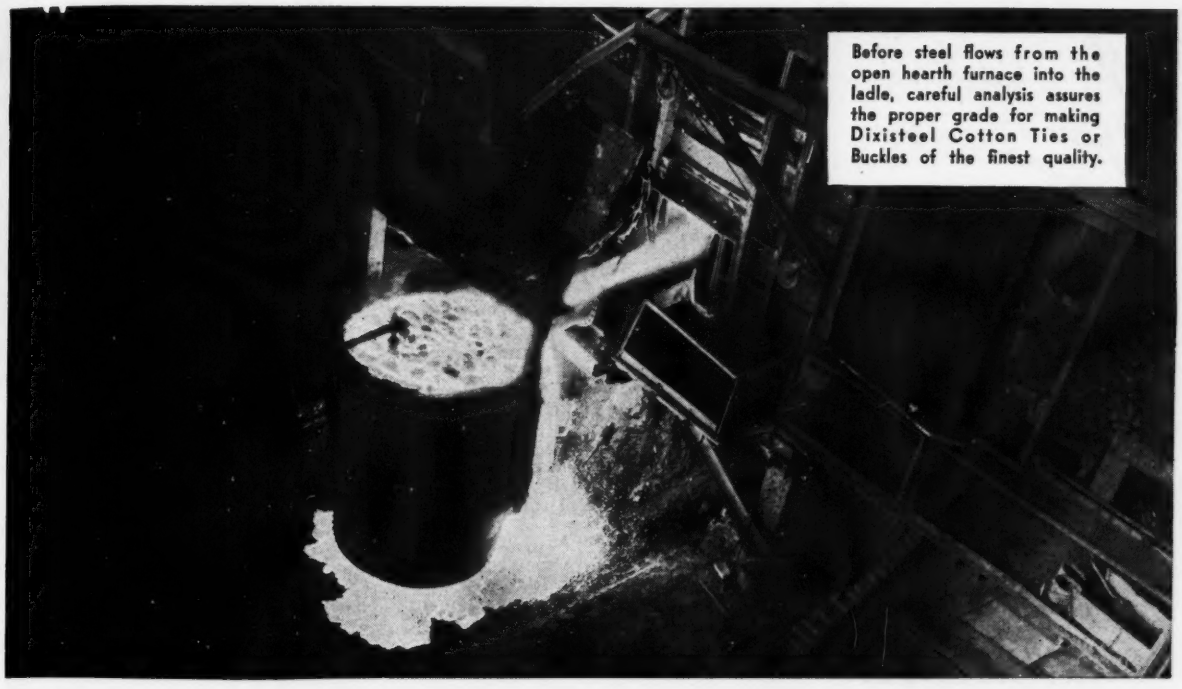
Distributor in Georgia: Lovett & Tharpe Hardware Company, Inc., Dublin, Ga.

Write direct to the Belt Corporation for FREE literature on the Harvest-Handler, or contact Petway Clipper Co., Waco, for name of nearest Harvest-Handler dealer.

BELT

THE BELT CORPORATION

7378 Stahl Road Orient, Ohio



Before steel flows from the open hearth furnace into the ladle, careful analysis assures the proper grade for making Dixisteel Cotton Ties or Buckles of the finest quality.

Steel is graded, too!

Just as certain grades of cotton are required for different fabrics, so are certain grades of steel required for different steel products.

The steel that is used to make Dixisteel Cotton Ties and Buckles is made especially for those products. And it is rolled in our own mills, where ties have been a specialty for nearly fifty years.

When it comes to ties and buckles, ginners know from long experience that they can depend on Dixisteel.

Standard bundles of Dixisteel Ties weigh approximately 45 pounds and contain 30 ties — each 11½ feet in length, 15/16-inches wide and of approximately 19½ gauge thickness. Thirty Dixisteel Buckles are firmly attached to each bundle. Sixty-pound Dixisteel Ties are also available. They vary from 45-pound ties only in thickness. Both weights are available with or without buckles.

Specify Dixisteel Cotton Ties and Buckles and be sure of uniform quality, strength, durability and finish.

DIXISTEEL BUCKLES *made to bear the brunt*

The buckle gets the business when the press is opened, for it bears the brunt of the stress and strain. That is why buckles are so important to ginners. Dixisteel Buckles are made from special-analysis steel to withstand the strain and pull. They won't give way or cut the tie.

Scientifically designed, Dixisteel Buckles thread easily, provide firm seating and will not slip up or down.

Available with Dixisteel Ties or separately in kegs or carload lots. Specify Dixisteel Buckles and be safe!

made only by the

DIXISTEEL COTTON TIES AND BUCKLES

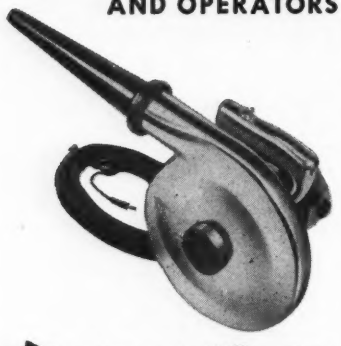
Atlantic Steel Company

MAKERS OF DIXISTEEL SINCE 1901

ATLANTA, GEORGIA

Approved

BY GIN OWNERS AND OPERATORS



TORNADO*

Cotton Gin Blowers reduce fire hazards • save machinery wear

BLOW OUT thick, clinging dust from the interiors of motors and machinery quickly. Keep your cotton gin operating smoothly at peak production at less power consumption—and with lowered insurance rates.

TORNADO* Portable Electric Blowers are now used by more cotton gins for quick, safe cleaning than any other cleaner. Have tremendous power. Shoot a concentrated blast of dry air that instantly removes every particle of dust from motor and machinery interiors and other hard-to-reach places. Plug into any ordinary electric outlet. Light in weight. Easily handled.

Standard suction attachments quickly convert the TORNADO* into a convenient

Pac-Vac

VACUUM CLEANER for quick, safe SUCTION cleaning

Slung over the shoulder to leave both hands free for easy operation in cramped quarters. Quickly draws out all dust and dirt into compact, dust-tight bag. Powerful suction removes every trace of lint, gritty particles and dirt. Light in weight. Easy to carry about and to operate.

Bulletin 579 contains complete information

WRITE FOR IT

*Trade Mark Reg. U. S. Pat. Off.

BREUER ELECTRIC MFG. CO.
5112 Ravenswood Avenue
Chicago 40, Illinois

Laugh IT OFF

On the witness stand the old mountaineer was as cool as a cucumber, and as close as a clam. The prosecuting attorney was beside himself with anger and impatience.

"Sir," hissed the lawyer, "do you swear upon your solemn oath that this is not your signature?" "Yep," replied the witness.

"It is not your handwriting?" "Nope," said the witness.

"Does it resemble your handwriting?" "Nope."

"Do you swear that it does not resemble your handwriting?" "Yep."

"You take your solemn oath that this writing does not resemble yours in a single particular. How can you be certain?" demanded the lawyer.

"Cain't write," replied the witness.

• • •

A radio star was recalling some very exciting fishing adventures. "My muscles of sinewy steel were more than a match for the denizen of the deep," he boasted. "Finally after a three-hour struggle, exhausted but triumphant, I landed the ferocious monster."

"Ferocious monster?" sneered a listener, "I saw a picture of that fish. At most it might have been six inches long."

"All right," conceded the narrator, "but in three hours a fish can lose a lot of weight."

• • •

Confused Groom: I was asked to buy either a casserole or a camisole. I can't remember which.

Clerk: That's easy. Is the chicken dead or alive?

• • •

The young wife greeted her husband affectionately when he returned from the office. "Poor darling!" she said. "You must be tired and hungry. Would you like some nice soup, tender chops with golden brown potatoes and green peas and mushrooms on toast?"

"No, darling," her husband answered firmly. "Let's save the money and eat at home."

• • •

"I'll never forget the time we were ice skating on the lake. Suddenly the ice broke, I plunged into the water. You threw off your coat and your shoes, and jumped in after me. What a pal!"

"What do you mean, a pal; why wouldn't I jump in after you? You had my skates on."

• • •

The partners decided they needed a hostess in their office so they advertised in the papers for one. After an interview with a big buxom blonde, the partners excused themselves to discuss her in private.

"She won't do," protested one, "she's too big in the first place."

"In the second place, too," agreed the other.

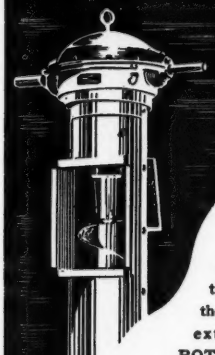
• • •

Wife: Will you be true when I am gone?

Husband: Yes, but don't be gone too long.

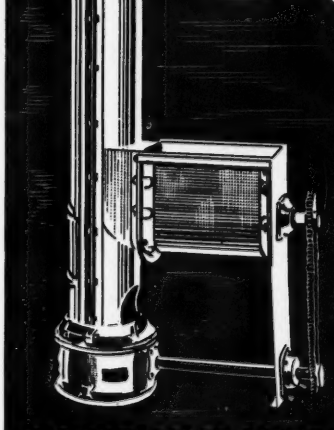
FIRST AND FOREMOST SINCE 1925

Rotor Lift



Specialized production on a quantity basis . . . that's the secret behind the extra value in the ROTOR LIFT vertical screw elevator. In almost every industrial area of the globe, elevating every type of commodity, the sound design and expert workmanship of ROTOR LIFTS result in consistently excellent performance.

Is it any wonder that discriminating buyers insist on all the advantages found only in genuine SOUTHWESTERN ROTOR LIFTS?



SOUTHWESTERN SUPPLY AND MACHINE WORKS

Phone local and long distance
3-8314 — 3-8315

OKLAHOMA CITY, OKLAHOMA
P. O. BOX 1217

LOWER YOUR COSTS PER BALE WITH...

MINNEAPOLIS-MOLINE
MODERN MACHINERY

1210-12A POWER

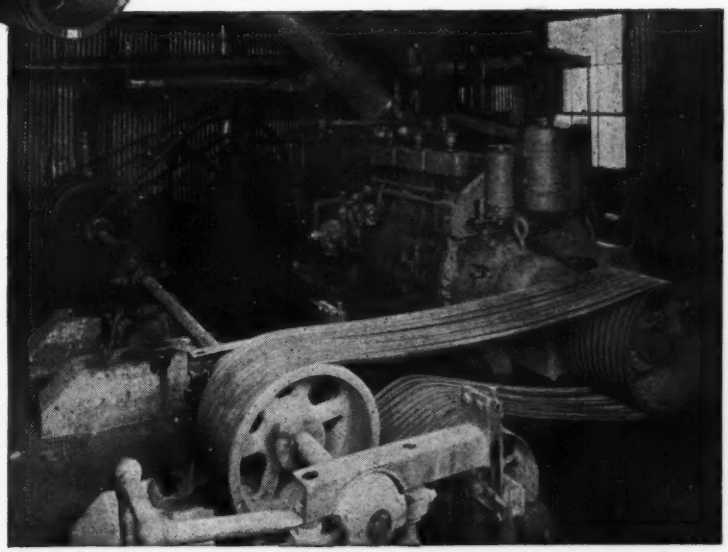
of proved dependability

Smooth Power for Continuous Duty....

MM 1210-12A power is a proved way to cut costs. The MM 1210-12A unit with its low cost per h. p. offers you exceptional fuel savings and power value. Smooth 12-cylinder power with counter-balanced crankshafts minimizes vibration, lengthens engine life and lowers maintenance costs. Equipment driven by the 1210-12A lasts longer since there is less transmitted vibration.

You Get These *Plus* Values with the MM 1210-12A

- ***Regulated Cooling*** and water-cooled manifolds give uniform operating temperatures throughout engine for most efficient long-life performance.
- ***Crankcase Ventilating*** minimizes engine oil sludge for more effective lubrication and reduced maintenance.
- ***Cylinder Head and Blocks*** are cast in pairs and are removable for economical low-cost servicing.
- ***Front Power Take-Off*** for direct drive equips the 1210-12A for easy installation where conditions require opposite rotation or auxiliary drive.
- ***Crankshafts and Connecting Rods*** are drop-forged steel. Precision-built shell type bearings are replaceable.
- ***Camshafts*** are of wear-resistant Proferall metal with flame-hardened cams to produce an extremely hard-wearing surface.



MM 1210-12A units furnishing power requirements for the Dockery Gin at Ruleville, Miss.

MINNEAPOLIS-MOLINE

MINNEAPOLIS 1, MINNESOTA

Southern Cooks *prefer...*

FAMED throughout the nation as fine cooks, more Southern homemakers continue to choose Swift's Jewel shortening for better baking and frying.

Careful and scientific blending of choice ingredients to meet the rigid standards of Swift's laboratories results in a product of outstanding performance.

It's easy to understand why Jewel is a favorite in the South.

•

SWIFT & COMPANY

THE COTTON GIN AND OIL MILL

PRESS

51st YEAR

THE MAGAZINE OF THE COTTON GINNING AND OILSEED PROCESSING INDUSTRIES

Volume 51 **June 10, 1950** **Number 12**

Published every other Saturday in our own printing plant at 3116 Commerce Street, Dallas 1, Texas

Officers and Editorial Staff

RICHARD HAUGHTON
President and Managing Editor

DICK HAUGHTON, JR.
Executive Vice-President and Advertising Manager

GEORGE H. TRAYLOR
Vice-President and Treasurer

IVAN J. CAMPBELL
Vice-President and Associate Editor

B. P. RIDGWAY
Vice-President and General Superintendent

ANN JARRATT
Editorial Assistant

Washington Representatives
(Editorial Only)
FRED BAILEY and JAY RICHTER
744 Jackson Place, N.W.
Washington 6, D. C.

•

Official Magazine of:

National Cottonseed Products Association

National Cotton Ginners' Association
Alabama Cotton Ginners' Association
Arkansas-Missouri Ginners' Association
Arizona Ginners' Association
California Cotton Ginners' Association
The Carolinas Ginners' Association
Georgia Cotton Ginners' Association
Louisiana-Mississippi Cotton Ginners' Association
Oklahoma Cotton Ginners' Association
Tennessee Cotton Ginners' Association
Texas Cotton Ginners' Association

The Cotton Gin and Oil Mill Press *is the Official Magazine of the foregoing associations for official communications and news releases, but the associations are in no way responsible for the editorial expressions or policies contained herein.*

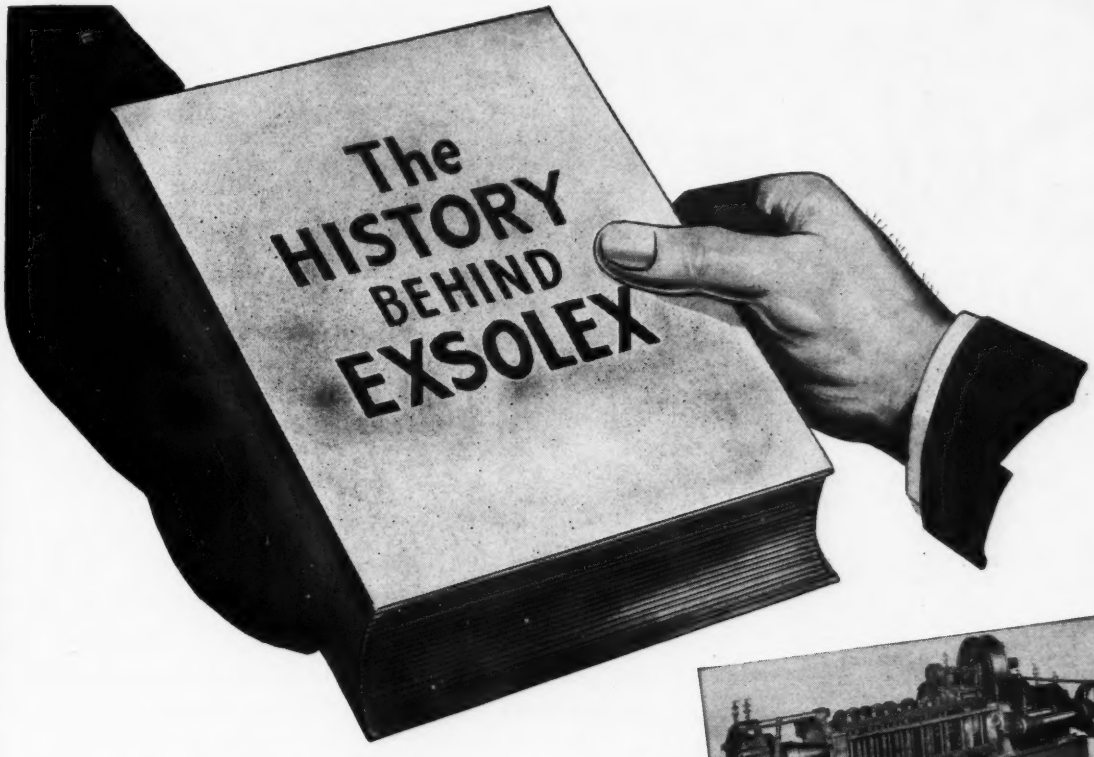
•

Subscription Rates: 1 year $3; 2 years $5; 3 years $7; foreign $3.50 per year.
Executive and Editorial Offices: 3116 Commerce St., Dallas 1, Texas

■ **Pictured on the cover are two ginners, a cottonseed crusher, a farmer, and a representative of Oklahoma A. & M. College. These men are representative of the groups that have joined forces with the College in an intensive program to put Oklahoma cotton on the comeback trail (see story beginning page 14). Left to right they are: Curtis Opitz, Binger, farmer; Arthur Opitz, Binger, ginner; Marvin Slack, Anadarko, cottonseed crusher; O. L. Shoptaw, Binger, ginner; and Jim Tomlinson, Anadarko, Oklahoma Agricultural Experiment Station.**

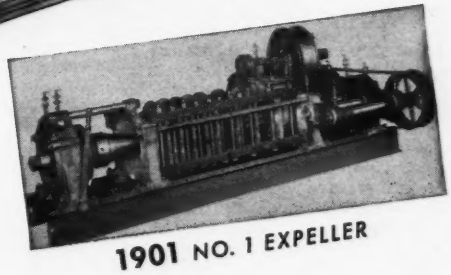
Photo by The Cotton Gin and Oil Mill Press

A PROGRESSIVE AND RESPONSIBLE PUBLICATION
READ BY COTTON GINNERS, COTTONSEED CRUSHERS AND OTHER OILSEED PROCESSORS FROM CALIFORNIA TO THE CAROLINAS



THE VEGETABLE OIL milling industry has heard about the amazing results of the Anderson Exsolex process at the Delta Products Company, Wilson, Arkansas . . . but few people know fully the history behind Exsolex. The story starts back in 1901 when the V. D. Anderson Company brought out the old No. 1 Expeller* for without Expellers, Exsolex would never be possible. For almost 50 years Anderson Engineers worked hand in hand with the oil milling industry, studying their needs and perfecting and patenting newer Expeller parts and models.

As early as 1918 Anderson was studying pre-pressing in foreign countries . . . Expellers were being used in these installations. Although these pre-pressing results were disappointing, Anderson continued to study pre-pressing, and came to the conclusion, that with the right type of equipment and oil milling know-how, an entirely new process could be developed to obtain a much lower residual oil content. Consequently, a few years ago we designed the original outdoor type solvent plant which is establishing records of operating economy. Finally combining all we had learned through a half-century of work on Expellers, pre-pressing and solvent extraction units, we introduced the remarkable Exsolex process, which has lowered the residual oil in the meal to a point undreamed of a few years ago. Capitalize on this half-century of oil milling progress in developing Exsolex by writing us about your oil milling requirements.



1901 NO. 1 EXPELLER

1918 EUROPEAN PREPRESSING

1946 SOLVENT EXTRACTION

THE V. D. ANDERSON COMPANY
1941 WEST 96TH STREET • CLEVELAND 2, OHIO

*Exclusive Trade-Mark registered in U. S. Patent Office and in Foreign Countries

Sesame

A New Oilseed Crop for the South . . .

By K. S. MARKLEY

Southern Regional Research Laboratory, New Orleans, La.

• This paper by Doctor Markley was given at the fifty-fourth Annual Convention of the National Cottonseed Products Association at Houston, Texas, May 15-17. The author is head of the Oil and Oilseed Division at the Laboratory, which is achieving notable results in research on cotton and cottonseed products and other Southern crops.

SESAME (*Sesamum indicum* L.) and soybeans (*Glycine max* (L.) Merrill) are no doubt the two oldest oilseeds cultivated by man. Both are of Asiatic origin. Sesame is adapted primarily to tropical and subtropical climates and the soybean to temperate climates. For these reasons sesame has, from time immemorial, been grown in India and Southern China while soybeans were grown in Northern China and Manchuria. Likewise, for these reasons, soybeans are ideally adapted to the climate of the Corn Belt states and sesame to that of the Cotton Belt states.

Sesame, like the soybean, is not grown exclusively for processing into oil and meal. The whole seed is used in the baking industry and is best known in this country as a topping and decoration on bread, rolls, and buns and less so in the form of sesame butter. In other countries it is used in confections and in the form of a drink resembling malted milk. The ground meal is used in cakes and pastries. The oil is superior in many ways to any other common edible oil and the meal is highly nutritious as a livestock feed. Sesame meal is especially high in methionine, an essential amino acid in which soybean meal is very deficient (0.4 to 0.9%). Recent nutrition studies have indicated that sesame and soybean meals can be combined in such proportions that together they form a nearly complete protein supplement with respect to the essential amino acid requirements of most farm animals.

The cultivation of sesame has, until recently, been confined primarily to India, China, the near East, and Africa.

TABLE 1

ESTIMATED WORLD PRODUCTION OF VEGETABLE OILS, 1935-39 AND 1949[1]

(1,000 short tons)

Oil	Average 1935-39	1949
Peanut	1,659	1,966
Rapeseed	1,362	1,641
Cottonseed	1,670	1,600
Soybean	1,345	1,490
Coconut	1,610	1,300
Linseed	1,160	1,187
Olive	960	985
Sunflower	630	938
Sesame	681	693
Palm	680	635

[1]Office of Foreign Agricultural Relations, Foreign Agriculture Circular FFO 4-50 (March 6, 1950).

K. S. MARKLEY

More recently it has been grown in Central America and the northern countries of South America (1). Comparative data for the production of oil from the principal oilseed crops of the world are shown in Table 1. In general, there has been little change in the amount of oil produced or the relative positions of the various oils in 1949 compared with the 5-year period immediately preceding World War II. There have, however, been several shifts in the principal areas of production with respect to several of the oils listed in Table 1, the most notable of which occurred in the case of soybean oil.

Despite many advantages of sesame as an oilseed its production in the past has been confined to areas with an abundant supply of cheap labor because of two inherent characteristics of the plant, namely, uneven ripening of the seed pods and a tendency of the seed to shatter (dehiscence). Both of these characters have prevented adaptation of the crop to mechanized production methods. Plant breeders in a half dozen different countries are working intensively to develop strains or varieties in which uneven ripening and tendency to shatter will be absent (1).

While these characteristics have not yet been entirely eliminated, better varieties have been developed and fairly large acreages of sesame are being produced in the Western Hemisphere largely by mechanized means. Preparation of the soil, planting, and cultivation is being carried out with standard farm implements. It can be harvested with corn and wheat binders, matured in the shock, and threshed with modified wheat threshers. Approximately 10,000 acres were handled in this manner in 1949 in the State of Portuguesa, Venezuela. The same practices can be followed in the United States.

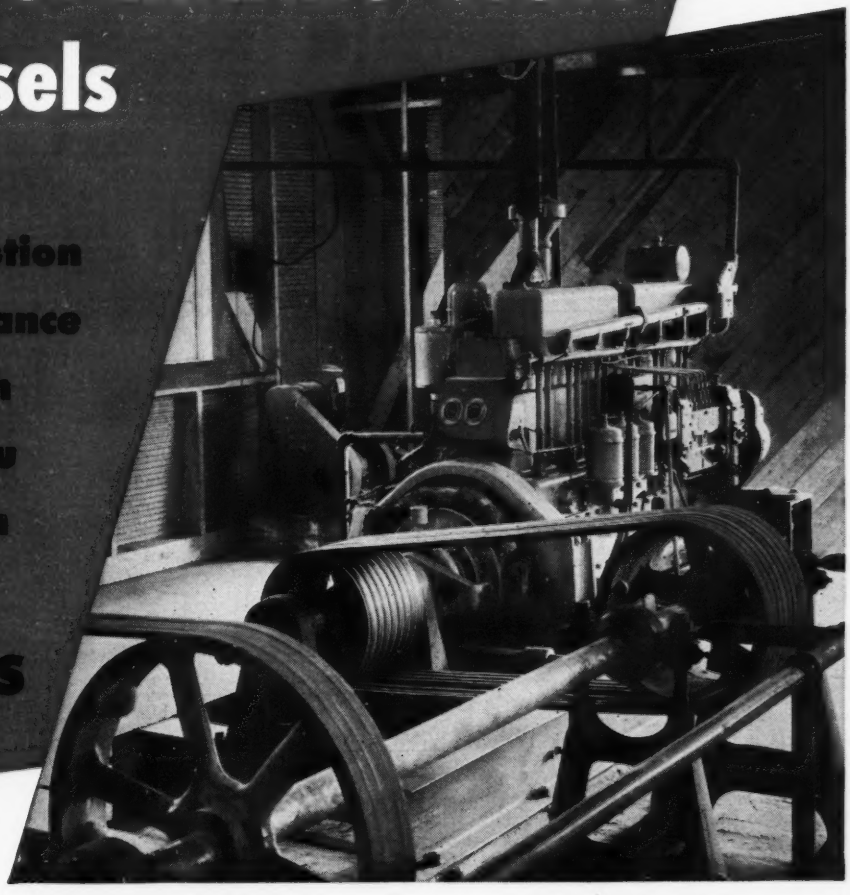
One of the advantages of growing sesame is readily seen from the figures in Table 2 for the yield of seed and oil per acre for the principal oilseed crops of the world. The average yield of sesame in Nicaragua for 1947, namely, 800 pounds per acre, is approximately the same as the average for Venezuela for the past several years.

A still further advantage of sesame over other domestic oilseed crops may be seen from the data in Table 3 which

LOWER OPERATING COSTS for Diesels

Fuel consumption and maintenance costs are both less when you lubricate with

TEXACO URSA OILS



THEY *keep Diesels clean*—that's the big reason why you can be sure of lower operating costs with *Texaco Ursa Oils*. These world-famous lubricants are especially made to resist oxidation and stand up under Diesel heat and pressure. They keep rings free, keep harmful carbon and sludge from forming.

Texaco Ursa Oils assure better compression and combustion, longer life for bearings and all moving parts . . . thus reduce fuel consumption and maintenance costs. There is a complete line of *Texaco Ursa Oils,* approved by leading Diesel manufacturers and used by operators everywhere. In fact—

More stationary Diesel h.p. in the U. S. is lubricated with Texaco Ursa Oils than with any other brand.

You can assure lower operating costs for gears, too, by using *Texaco Meropa Lubricants.* These "extreme pressure" lubricants give full protection to enclosed gears . . . assure smoother operation and longer gear life.

Let a Texaco Lubrication Engineer help you get greater efficiency and economy from all your equipment. Just call the nearest of the more than 2,000 Texaco Wholesale Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.

TEXACO

TEXACO Lubricants, Fuels and Lubrication Engineering Service

TUNE IN . . . TEXACO STAR THEATER starring MILTON BERLE on television every Tuesday night. See newspaper for time and station.

TABLE 2
AVERAGE YIELDS OF SEED AND OIL PER ACRE

Oilseed	Seed lb./acre	Oil lb./acre
Palm and palm kernel[1]	——	2,500
Coconut (copra)[2]	1,160	730
Sesame[3]	800	375
Rapeseed (colza)[4]	1,000	350
Sunflower[5]	1,000	275
Peanuts[6]	708	205
Flaxseed[6]	504	172
Soybeans[6]	1,128	170
Cottonseed[6]	437	70

[1]Netherlands E. Indies, 1936.
[2]Philippine Islands, 1932.
[3]Nicaragua, 1947.
[4]France, 1930-39 average.
[5]France, 1946-47 average.
[6]United States, 1937-46 average.

TABLE 3
AVERAGE YIELDS OF OIL AND OIL MEAL PER HUNDRED POUNDS OF OIL-BEARING MATERIAL, UNITED STATES[1]

Oil-Bearing Material	Yield per 100 Lbs.	
	Oil Pounds	Meal Pounds
Copra	63.0	35.0
Babassu kernels	63.0	35.0
Sesame seed	47.0	48.0
Palm kernels	45.0	53.0
Flaxseed	34.0	64.0
Peanuts	29.0	43.6
Sunflower seed	25.0	73.0
Cottonseed	15.5	45.0
Soybeans	15.0	80.0

[1]From P. L. Hansen and R. L. Mighell, Oil Crops in American Farming, U.S. Department of Agriculture Tech. Bull. No. 940, 1947.

gives the yields of oil and meal per hundred pounds of seed.

None of these figures, however, indicates the superior quality of seed and oil from the standpoint of the processor, refiner, and consumer and it is with these qualities that the remainder of this article is devoted.

Although sesame seed and oil have been long-established commodities in international trade and both are well known in this country, surprisingly little has been published in the technical literature concerning their composition, characteristics, and utilization. This dearth of published information on sesame seed and oil led the Southern Regional Research Laboratory to undertake an intensive investigation of this oilseed. The work was carried out largely by a group of chemists and technologists from abroad who came to the Laboratory for advanced training in fat and oil technology. The results of their work are appearing in a series of five publications and the Journal of the American Oil Chemists' Society (2-6) and several others which are still in process of preparation. The following data and discussion are condensed from these publications and from the author's observations of the production and processing of this oilseed in Venezuela (7) and Guatemala (8).

Sesame seed is free flowing and stores well, even in hot, humid climates of the tropics, for long periods of time without loss in the quality of oil or meal. It requires no decortication or preparation other than cleaning prior to milling. It can be processed in continuous screw presses, hydraulic presses, or by forepressing and solvent extraction. All of these processes are commonly used with this seed. In the United States and other countries of the Western Hemisphere continuous presses are preferred although some processing is done in hydraulic presses.

The work on sesame seed and oil at the Southern Regional Research Laboratory was carried out with four varieties grown at Clemson, South Carolina; Lincoln, Nebraska; and Nicaragua, Central America. They are identified as follows: SO-1, Clemson 4522 (1948); SO-2, Clemson 4520 (1948); SO-3, Nebraska 1025-3 (1948); SO-4, Nicaragua, variety unknown which was imported and stored 14 months prior to processing.

The oil was recovered from each of these four varieties by solvent extraction in a batch extractor. Each oil was examined with respect to its physical and chemical characteristics and evaluated for use as a salad and cooking oil and after hardening to shortening consistency. The details of the methods used are contained in a series of articles which are being published in the Journal of the American Oil Chemists' Society (2-6), consequently only the results and a discussion of their significance are given here.

Results

The compositions of the seeds and the solvent-extracted meals are given in Table 4. Reference to these data indicate

TABLE 4
COMPOSITION OF SESAME SEED AND EXTRACTED MEALS

Constituent	SO-1	SO-2	SO-3	SO-4
Seed				
Moisture, %	4.82	4.98	5.33	4.90
Oil, %	54.8	55.6	51.2	49.5
Nitrogen, %	3.11	3.37	4.08	4.20
Protein (N X 6.25), %	19.4	21.1	25.5	26.4
Extracted meal				
Moisture, %	8.04	5.50	5.34	6.09
Oil, %	2.34	15.40[1]	3.47	6.47
Nitrogen, %	7.10	6.74	8.68	—
Protein (N X 6.25), %	44.4	41.8	54.2	—

[1]Incomplete extraction because of channeling in the extractor.

that the seed contains from 49 to 55 percent oil and 19 to 26 percent protein. Meal of approximately 2.5 to 6.5 percent oil content contains approximately 45 to 55 percent protein.

The characteristics of the crude sesame oils are given in Table 5. Generally, the color of the crude oil is light yellow with very little red as is evident from the Lovibond color values of Table 5. The content of free fatty acids was low in all of the oils even after storage of the seed for 14 months prior to processing as in the case of SO-4. Actually, this seed was harvested nearly two years prior to analysis and stored in Nicaragua for an unknown period before shipment to the United States.

Average iodine value of the four oils was 111.4 compared to about 103 to 109 for cottonseed oil. Two of the four oils were natural "winter" oils while the two others required winterization to separate a small amount of "stearine" fraction.

The compositions of fatty acids of the crude sesame oils, determined by two different methods, are given in Table 6. The average values of the four oils determined by the two methods are as follows: Saturated acids 13.8 percent; oleic acid 40.4 percent; linoleic acid 44.2 percent. The average composition of the fatty acids of cottonseed oil from the southeastern United States and the Mississippi Valley as given by Bailey (9) are: Saturated acids 25 percent; oleic acid 25 percent; linoleic acid 50 percent. The principal difference in the compositions of sesame and cottonseed oils is the lower content of saturated acids and higher content of oleic acid in the former compared to the latter.

Sesame oil can be refined with relatively low refining losses to produce very light colored products, and after bleaching to give practically colorless oils as may be seen from the data in Table 7. The losses shown in this table were determined by the laboratory cup refining method and are therefore higher than those which would be obtained by the continuous caustic soda or soda ash methods which are generally used in the United States.

The refined and bleached sesame oils were readily hydrogenated to shortening consistency by standard conditions of hydrogenation [15 p.s.i. pressure, 350°F. (176.7°C.), 0.1 percent dry-reduced, elec-

(Continued on Page 60)

TABLE 5
CHARACTERISTICS OF CRUDE SESAME OIL

Characteristics	SO-1	SO-2	SO-3	SO-4
Color, Lovibond Y/R, 5¼ in. cell	70/2.4	70/16.7	70/4.3	70/4.0
Specific gravity, 25°/25°	0.9188	0.9192	0.9193	0.9207
Optical activity, α (at 25°C., D line), 1 dm. cell	0.93	0.95	1.02	1.44
Titer, °C	23.1	23.7	23.6	23.5
Cold test[1]	Does not pass test	Does not pass test	Passes test	Passes test
Volatile matter, %	0	0.03	0	0.02
Free fatty acids (as oleic), %	0.5	1.8	1.5	2.0
Hydroxyl number	1.1	4.1	3.3	4.2
Iodine value, Wijs	111.5	111.6	109.8	112.8
Thiocyanogen value	76.2	76.1	75.3	75.0
Saponification value	188.2	188.3	188.0	186.9
Unsaponifiable matter, %	1.63	1.72	1.78	2.28
Reichert-Meissl value	0.2	0.2	0.1	0.1
Polenske value	0.4	0.5	0.2	0.1
Refractive index n (at 40°C., D line)	1.4660	1.4671	1.4658	1.4664

[1]Test carried out with the refined and bleached oils.

TABLE 6
FATTY COMPOSITIONS OF THE CRUDE SESAME OILS

Oil	Glycerides of						
	Linoleic %		Oleic %		Saturated %		
	A[1]	B[2]	A[1]	B[2]	A[1]	B[2]	C[3]
SO-1	43.4	41.4	42.1	45.4	12.8	11.2	13.4
SO-2	43.8	46.1	41.6	36.4	12.9	15.5	13.4
SO-3	42.4	43.6	42.1	39.1	13.6	15.1	13.8
SO-4	46.6	46.6	37.3	36.1	13.8	14.4	13.8

[1]Calculated from iodine-thiocyanogen values, corrected for unsaponifiable matter.
[2]Spectrophotometric analysis after alkali-isomerization, corrected for unsaponifiable matter.
[3]Modified Bertram oxidation method.

How Stran-Steel Quonsets

LEVEL THE WAY TO GREATER PROFITS WITH HORIZONTAL COTTON SEED STORAGE

STISHER GIN COMPANY, CULLMAN, ALABAMA

This 40′ x 100′ Quonset stores 700 tons of cotton seed, and pays owners extra dividends by acting as a repair shop and warehouse building when seed has been delivered to oil mill.

Today enterprising ginners, like the Stisher Gin Company, are enlarging their trading areas and increasing year-round profits thanks to a new conception of *horizontal storage* provided by all-steel Quonsets. For Quonsets permit different types of *quickly accessible horizontal* storage under one roof—offer any-length flexibility, plus the extra storage space of clear-span design. Quonsets are *fire-safe* and wind-resistant . . . framed with N-A-X alloy steel for lasting durability. For details, fill out and mail this coupon—

GREAT LAKES STEEL CORPORATION

Stran-Steel Division • Ecorse, Detroit 29, Michigan

UNIT OF NATIONAL STEEL CORPORATION

YOU NAIL TO STRAN STEEL FRAMING

Stran-Steel and Quonset Reg. U. S. Pat. Off.

GREAT LAKES STEEL CORPORATION
Stran-Steel Division
Ecorse, Detroit 29, Michigan

Gentlemen: Please have your representative call with full details on Quonsets for horizontal storage, cotton houses, etc.

Name_____

Address_____

Photo by The Cotton Gin and Oil Mill Press

Jim Tomlinson (left), Oklahoma Agricultural Experiment Station, and Marvin Slack (right), Anadarko Cotton Oil Company, Anadarko, observe aphid damage to cotton on farm of Sam Holmberg (center), near Erick.

• In Oklahoma

Cotton hits the Comeback Trail

Cotton was all but dead as a major crop in Oklahoma, but private industry and A. & M. College officials decided the patient was worth saving.

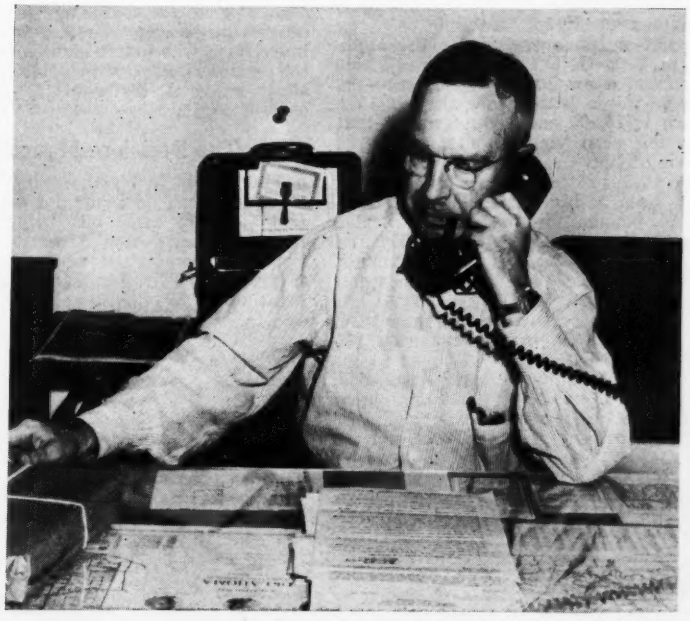
by Ivan J. Campbell

Associate Editor

NEAR THE END of the 1947-48 crop year Oklahoma cotton-industry leaders and officials and staff members of the Oklahoma A. & M. College met in solemn consultation at the bedside of the state's desperately sick cotton economy. They were there to decide whether it was worth while to make a final effort to save the patient's life or simply give up and let cotton pass out of the picture as a major crop in Oklahoma.

The Record

• **The Picture Wasn't Pretty**—Looking at cotton's chart they found that the lint yield in 1947 was a mere 141 pounds per acre, the lowest in the Belt. The year before it was 123 pounds, an even lower low. They noted that harvested acreage in 1947 was only 1,120,000 acres. Look-



HORACE HAYDEN

OUT OF HIS FAITH in cotton and his state's ability to produce it profitably came the establishment of the Oklahoma Cotton Research Foundation and a program for cotton that promises to put the old man back on his throne.

Photo by The Cotton Gin and Oil Mill Press

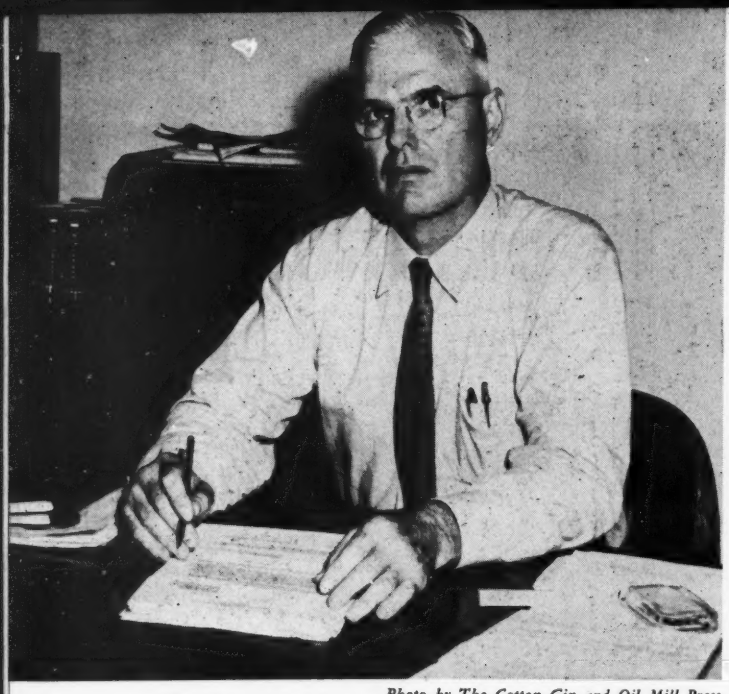


Photo by The Cotton Gin and Oil Mill Press

SHAWNEE BROWN, director of the Oklahoma Agricultural Extension Service, believes cotton has a bright new future in the state and is directing the important educational phases of the revitalized cotton improvement program with efficiency and enthusiasm.

Oklahoma A. & M. College Photo.

LOUIS E. HAWKINS, vice-director of the Oklahoma Agricultural Experiment Station, directs the vital research phases of the state's cotton improvement program. He says the ginners and crushers "merit the strongest praise" for their strong support of the program.

ing further, they found that the state hadn't harvested as many as two million acres since 1937, when the figure was 2,372,000.

Other disturbing facts in the patient's case history showed up too. Thousands of farmers who once found cotton profitable had given up and forsaken it entirely, and many others were making only what actually amounted to token plantings of a crop they once hailed as King. There had been a big come-down from days of former glory. Not only had the King toppled from his throne—he was actually dying. In 1925, for example, Oklahoma produced 1,691,000 bales on 5,288,000 acres, a record for the state. But in 1926 Oklahoma hit her all-time high from a production standpoint—the acreage was a little under that of 1925—with 1,773,000 bales. But even in that year the acre yield was a mere 184 pounds of lint. Only twice in the history of the state's cotton production have acre yields been as high as the U.S. average of 254 pounds for the 10-year period 1938-47. It was 286 pounds in 1897 and the year following it was 295 pounds. Yields have been over 200 pounds per acre only seven times since 1909. The highest yield since that year was in 1949, when it was 229 pounds—up from 175 pounds in 1948.

Oklahoma's cotton industry was sick, all right, for what the consultants saw at the patient's bedside was a dismal record in cotton production that had the state in last place among the 14 major cotton-producing states in acre-yields for the 10-year period 1938-47; it was in tenth place in total production for that period.

• **Hang on—or Quit . . . Which?**—But even in the presence of a situation so disheartening and apparently so hopeless, the men from the A. & M. College and the cotton-industry leaders knew the rapidly failing patient could be revived. Experiment Station tests that had been conducted at seven points in the state convinced them that Oklahoma could average 300 pounds of lint per acre—and easily, too. It could be done, however, only with the full cooperation of all interested groups working together as a team.

Ginners, cottonseed crushers and other members of the industry had been going out of business on a wholesale basis for several years. Growers were tired of trying to make the traditional cash crop show a profit after paying higher and higher prices for poorer and poorer hand harvesting. Except for a few stubborn individuals who didn't know how to quit, the cotton industry in Oklahoma was about ready to throw in its chips and leave the game.

The Decision: Hang On

• **The Patient Is Worth Saving**—But the industry didn't quit, nor did the College. Instead there came into being in 1948 the Oklahoma Cotton Research Foundation, an organization whose purpose is to give the College solid backing in its work, to put up money to aid that work, and in every way possible to help bring acre yields up to a point where cotton is again a profitable crop for Oklahoma farmers.

• **One Man's Faith**—This vital new organization grew largely out of the unshakable faith of a man who never lost confidence in the ability of cotton in Oklahoma to make a successful comeback. He is Horace Hayden of Oklahoma City, and those who know him best and have worked with him will agree with us that he deserves the fullest measure of credit—more than any other individual, in fact—for putting Oklahoma cotton on the comeback trail. Horace Hayden translated his faith into action at a time when others were despairing of cotton's ability ever to recover in the state. He is secretary-treasurer of the Oklahoma Cotton Ginners' Association, the Oklahoma Cottonseed Crushers' Association, and executive vice-president of the National Cotton Ginners' Association. He is one of the soundest of our cotton industry leaders, and on the record one of the most tenacious men we have ever known.

The Oklahoma Cotton Resarch Foundation is an aggressive, close-knit organization of growers, ginners, cottonseed crushers, cooperatives, bankers, compresses, warehouses, and merchants. Its officers are R. M. Lucas, Chickasha Cotton Oil Company, Chickasha, president; Noble Bennett, Oklahoma Cotton Cooperative Association, vice-president;

J. D. FLEMING is a key man in the Extension Service's vast educational program for cotton in Oklahoma and last year was in charge of hundreds of cotton production demonstrations scattered over the state.

Photo by The Cotton Gin and Oil Mill Press

Horace Hayden, secretary-treasurer. Directors are Mr. Lucas and Mr. Bennett; James C. Stryon, cotton merchant, Hobart; O. A. Reese, compress-warehouse operator, Fort Worth, Texas; G. N. Irish, Muskogee Cotton Oil Company, Muskogee; and E. E. Huff, representing the producers, Chickasha. Lucas, Bennett and Huff comprise the Foundation's executive committee.

• **Three Objectives**—One of the Foundation's biggest jobs is to assist federal and state agencies in their enormous task of finding the answers to many problems connected with cotton production and getting those answers to the producers in a convincing manner. It has three objectives: (1) to see that the new Oklahoma Cotton Research Station at Chickasha — begun in 1948 — has complete facilities for doing all the research work necesary to adjust farm implements used in other states for use in Oklahoma under Oklahoma conditions; (2) to encourage establishment of one or more owner-operated demonstration farms in each cotton county of the state; and (3) to furnish agricultural students with a new loose-leaf type of textbook containing the lastest information on procedure in cotton production, harvesting and processing. The loose-leaf type of textbook was chosen so that new sheets can be furnished teachers to replace obsolete sheets as new information is developed.

• **Moral and Financial Backing**—The importance of the Foundation's strong moral support of the cooperative work of the Experiment Station, the Extension Service and USDA cannot be overemphasized. But of even greater importance is its financial backing of the great cotton improvement program it has helped those agencies to formulate. The money the Foundation pours into the program is provided by the ginners, crushers and other cotton interests that comprise the organization. These funds have been used wisely to help equip the Cotton Research Station at Chickasha and help pay for Experiment Station personnel working on various phases of the program.

Photo by The Cotton Gin and Oil Mill Press

THE NEW Cotton Research Station at Chickasha, which occupies a key place in Oklahoma's cotton improvement program, is in charge of I. M. Parrott (left above), its capable superintendent and plant breeder. Other staff members, reading left to right, are Mack Keathley, assistant plant breeder; and Jerome Simmons, farm foreman. Howard Foster, shown right, was secretary but is no longer connected with the station.

Out of the establishment of the Foundation there has come a great new interest on the part of everybody engaged in cotton production and processing; and the A. & M. College staff is encouraged and stimulated to greater effort by the knowledge that the people it works for are standing solidly behind it—morally and financially.

• **Wheat Growers Have Similar Organization**—After the Oklahoma Cotton Reserarch Foundation got its feet planted on solid ground and began to show tangible results, the state's wheat growers cast interested glances in its direction and decided they needed a similar organization with similar objectives. They now have an Oklahoma Wheat Research Foundation modeled along the lines followed by the cotton interests, with growers and handlers of wheat providing operating funds which it is estimated will amount to as much as $50,000 a year.

Oklahoma's peanut growers, noting the mounting benefits that have come to the cotton industry through the efforts of the Foundation, have decided to use some of their current funds for peanut research, along the same lines employed by the cotton and wheat interests.

• **Cotton Can Win**—Louis E. Hawkins, vice-director of the Oklahoma Agricultural Experiment Station, had this to say recently about the Foundation and the revitalized program for cotton in his state:

"Cotton continues to be one of the two

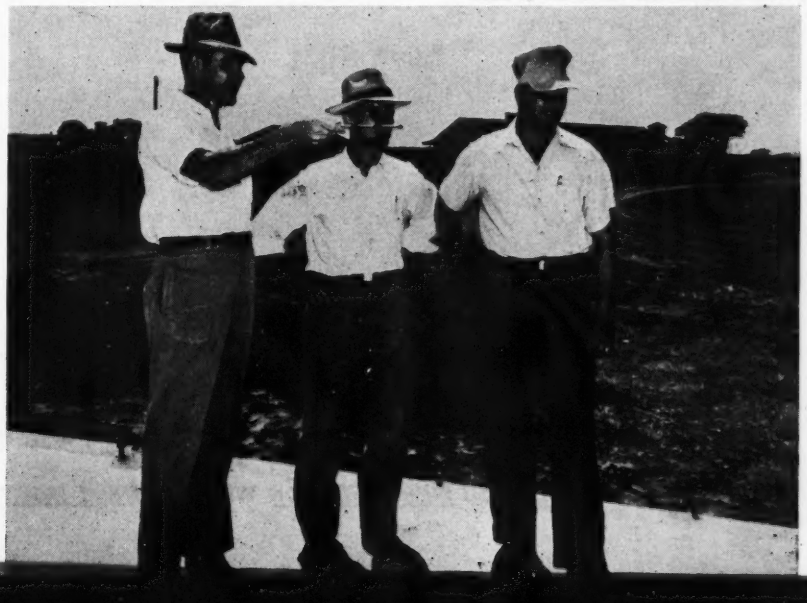
(Continued on Page 22)

JOHN M. GREEN, of the Agricultural Experiment Station at Stillwater, is in charge of Oklahoma's ambitious cotton breeding program. Heart of the program is at the new Cotton Research Station at Chickasha, which is using 36 experimental varieties in its tests.

Oklahoma A. & M. College Photo.

IN CHARGE of the highly important mechanization phase of Oklahoma's cotton improvement program is W. J. Oates (below left), agricultural engineer with the Experiment Station, Stillwater. Shown with Oates are Robert H. Witt (center), of the Experiment Station staff, Chickasha; and John J. Wooster (right), machinist in charge of farm machinery at Chickasha.

Photo by The Cotton Gin and Oil Mill Press



learn about Multiwalls...

and you'll never pack meal in anything else!

Multiwall paper bags do a cleaner, better job and cost less. That's why more mills everywhere are turning to St. Regis for modern, efficient packaging

St. Regis Multiwalls are easy to handle, easy to pack, take less space. They stand up under rough treatment. They protect your product against rain, mildew, caking—leave cars and floors cleaner.

Contents can't sift out of a St. Regis Multiwall Paper Bag. Contents stay cleaner, too, with no retention.

When you pack meal in St. Regis Multiwall Paper Bags with a one-man St. Regis Packer . . . you'll see production *go up* and man-hour costs *go down*. . . . For St. Regis means more efficient, more economical packaging . . . plus extra profits for *you*.

Write your nearest St. Regis Sales Office today for complete information. No obligation, of course.

SALES SUBSIDIARY OF ST. REGIS PAPER COMPANY

ST. REGIS

SALES CORPORATION

230 PARK AVENUE • NEW YORK 17, N. Y.

Allentown, Pa. · Atlanta
Baltimore · Birmingham
Boston · Chicago
Cleveland · Denver
Detroit · Houston
Kansas City, Mo. · Los Angeles
Louisville · Minneapolis
New York · Norfolk · Ocala, Fla.
Portland, Ore. · St. Louis
San Francisco · Seattle

In Canada:
St. Regis Paper Co. (Can.) Ltd.
Montreal · Hamilton · Vancouver

YOU BUY PROTECTION WHEN YOU BUY MULTIWALLS

Louisiana-Mississippi Ginners To Hold Separate Meetings

AT A RECENT meeting of the board of directors of the Louisiana-Mississippi Cotton Ginners' Association, it was decided to hold separate conventions in each state this year.

The meeting of Louisiana ginners will be held at the City Park Auditorium in Alexandria June 21. Mississippi ginners will hold their meeting at Hotel Greenville July 16-17. "Each meeting will be different," Gordon Marks, Association secretary, advises, "and each will offer new material and opportunities that will actually make it worth while to attend both meetings. Do not fail, however," he urges, "to attend the convention in your own state."

• **Oil Mills Will Provide Entertainment**—Louisiana ginners will be guests of the cottonseed oil mills at a barbecue and entertainment program during the Alexandria meeting. John E. Ross, Jr., agricultural economist at the U.S. Cotton Ginning Laboratory at Stoneville, Miss., will discuss a new study just completed, "Cost of Ginning, and Quality of Ginning in Louisiana." Other speakers will appear on the program to help make this one of the best meetings in the history of the Association.

The meeting of Mississippi ginners was planned to follow the Cotton Council's Beltwide Cotton Mechanization Conference to be held at Greenville and Stoneville July 13-14-15. Ginners from Louisiana and Mississippi had suggested that the Mississippi meeting follow the Conference so that they could easily take part in both events.

The meeting of Mississippi ginners will hear ginning problems discussed by staff members of the Stoneville ginning laboratory. Additional program details are to be announced later.

• **Reservations**—Those planning to attend the Alexandria meeting June 21 should write the Bentley Hotel at once for reservations, and those who expect to attend the mechanization conference prior to the Mississippi ginners meeting should write directly to the National Cotton Council, Memphis, Tenn., for hotel reservations. Reservations for the ginners meeting July 16-17 can be obtained by writing Hotel Greenville, Greenville, Miss., or Gordon Marks, secretary, Louisiana - Mississippi Cotton Ginners' Association, 515 Yazoo St., Jackson 5, Miss.

Officers of the Louisiana-Mississippi Association are J. H. Williams, Natchitoches, La., president; C. E. Fontenot, Eunice, La., vice-president for Louisiana; C. B. Young, Sardis, Miss., vice-president for Mississippi; G. M. Lester, Jackson, Miss., treasurer; and Gordon Marks, Jackson, Miss., secretary.

New Grass Eradicator—Flock of Geese

A new "grass eradicator" that reduces cotton chopping one-third or more is being used on farms in South Mississippi County, Arkansas, County Agent D. V. Maloch has reported. Moreover, farmers say, it is very inexpensive and works during rainy weather as well as during fair weather.

The "eradicator" is a flock of geese.

A. F. Glascoe, Osceola, declared that geese are the only practical means he has found for fighting Johnson grass. In 1949 he fenced 22 acres of cotton land badly infested with Johnson grass and put 50 geese on it. They did such a fine job of keeping the grass down, he said, that he had to turn them out in other cotton some of the time. Chopping was cut in half on the trial block. This year there is only a small amount of Johnson or crab grass in the field.

Horace Moore, Sr., found that geese reduced chopping on the Corono Lake Farm from 33 to 40 percent last year. He has doubled his geese for the 1950 crop and expects to continue to increase the number until he has enough to take care of his entire cotton crop.

SEND YOUR BALES ON THEIR WAY
PROTECTED BY
Hindoo
TWO POUND BAGGING
21 POUNDS TARE
Insist on good, strong HINDOO Bagging that keeps your cotton clean and fresh.
LUDLOW'S HINDOO
2-lb., 21-lbs. Tare
is made exclusively for wrapping and protecting American cotton bales.
IT DOES THE JOB BETTER
Ludlow QUALITY OPEN WEAVE
Ludlow MANUFACTURING & SALES CO.
MEMPHIS, TENN. ATLANTA, GA. GALVESTON, TEXAS. BOSTON, MASS.

People in The Press

■ We could almost fill this space with the names of those in private industry and at the Oklahoma A. & M. College who have joined hands to put cotton in Oklahoma on the comeback trail. The following is only a partial, incomplete list of the men who are taking an active part in the state's ambitious program to restore cotton to its former place of glory: **Horace Hayden**, of the Oklahoma ginners and crushers associations; **Shawnee Brown**, Extension Service director; **Louis E. Hawkins**, Experiment Station vice-director; **J. D. Fleming**, of the Extension Service; **W. J. Oates**, of the Agricultural Experiment Station; **Jim Tomlinson**, of the Agricultural Experiment Station; **I. M. Parrott**, of the Chickasha Cotton Research Station; **Robert H. Witt**, also of the Chickasha station; **John M. Green**, of the Agricultural Experiment Station. Be sure to read what these men and others are doing for cotton in their state. **Page 15.**

• **Dr. K. S. Markley**, head, Oil and Oilseed Division, Southern Regional Research Laboratory, is author of a paper on sesame given at NCPA convention in Houston which is reprinted in this issue. He also receives USDA award. **Pages 10 and 66.**

• **L. Palmer Brown, Jr.**, former cottonseed oil mill executive, dies after a short illness. **Page 58.**

• **John E. Ross, Jr.**, Stoneville Laboratory agricultural economist, writes an article on the part of management and labor in ginning efficiency and cost. **Page 59.**

• A meeting of Rio Grande Valley ginners at McAllen June 13 is announced by **Jay C. Stilley**, executive vice-president, Texas Cotton Ginners' Association. **Page 61.**

• **Horace Hayden**, secretary-treasurer of the Oklahoma ginners and crushers associations, is honored by 4-H Clubs. **Page 62.**

• Speakers at Beltwide Cotton Mechanization Conference July 13-15 announced by **Claude L. Welch**, National Cotton Council, include: **Dr. Fred T. Mitchell**, president, Mississippi State College; Cotton Council President **Harold A. Young**; **E. D. White**, cotton assistant to the Secretary of Agriculture; **Dr. Frank J. Welch**, Mississippi State College dean of agriculture; **H. H. Bloom**, executive vice-president of Massey-Harris Co.; **Ed Lipscomb**, National Cotton Council public relations director; **Theodore Johnson**, president, J. I. Case Co.; **James W. Hand, Jr.**, Mississippi planter; and **P. H. Noland**, president, B. F. Avery & Sons Co. **Page 63.**

• Superintendent **Otis Gillentine**, Secretary-treasurer **J. A. Strain**, Cashier **J. H. Adams** and President **J. R. Strain** receive a safety award for Tupelo Oil & Gin Co. from U.S. Fidelity & Guaranty Co. representatives **L. F. Scott, Charlie Fitts** and **C. C. Strain.** **Page 64.**

• Purchase of Lawther-Meadows Mill by Southland Cotton Oil Co. is announced by **Jas. R. Gill**, vice-president and general manager of Southland, who says the mill will be managed by **Monroe May**, with **Jack Walraven** as assistant. **E. B. Royce** and **Bill Steger** are sales manager and assistant sales manager, respectively. **Page 65.**

• **Ernest D. Black** is back on the job after being hospitalized at NCPA's Houston convention. **Page 65.**

• **Ed Lipscomb**, National Cotton Council, and the **Hon. Leander H. Perez** of New Orleans will be featured speakers at Mississippi crushers convention. **Page 26.**

• On the program for the National Oil Mill Superintendents' Association meeting in Dallas are **R. D. Ryan**, Producers Cotton Oil Co.; **H. F. Crossno**, California Cotton Oil Corp.; **E. R. Cousins** and **James A. Kime**, Southern Regional Research Laboratory; **W. G. Davis, Jr.**, and **J. H. Brawner**, Western Cottonoil Co.; **N. H. Moore**, Delta Products Co.; **A. Cecil Wamble**, Cottonseed Products Research Laboratory; **W. D. Baldwin**, Hercules Powder Co.; **Salvador F. Rojas**, Distribuidora de Algodones, S. A.; and **C. C. Castillow**, Refuge Cotton Oil Co. **Page 28.**

• Congressman **Stephen Pace** headed speakers at joint convention of Alabama-Florida and Georgia crushers associations. Also on the program were **W. A. Hartman**, PMA Commodity Office; **S. M. Harmon**, NCPA secretary-treasurer; **Warren Whitney**; and **W. D. Lowe**, NCPA president. **H. G. Ray, Jr.**, heads Georgia association for ensuing year, with **Sam McGowan** as vice-president and **J. E. Moses** secretary-treasurer. Alabama-Florida officers are **F. W. Hurston**, president, and **T. R. Cain**, executive secretary. **Page 38.**

•Oklahoma crushers elect **G. N. Irish** president and **Amos L. Kobs** vice-president at Muskogee convention. **Horace Hayden** is continued as secretary-treasurer. Speakers include Retiring President **A. L. Hazelton**; **R. M. Lucas**, Oklahoma Cotton Research Foundation president; **Garlon A. Harper**, NCPA Educational Service; **T. H. Gregory**, NCPA executive vice-president; **Dr. L. E. Hawkins**, Oklahoma Experiment Station; **Shawnee Brown**, Oklahoma Extension Service; **Ira Holler**, 4-H Clubs; and **Hal Dilworth**, National Cotton Council. **Page 42.**

• **Edward M. O'Connor** succeeds **Clifford E. Butler** as executive vice-president and general manager of Borden's Soy Processing Co. **P. J. Queroli** takes on duties as assistant secretary as well as assistant treasurer. **Page 47.**

• Chase Bag Co. appoints **John A. Sutherlin** sales manager at New Orleans, announces **J. H. Counce**, manager there. **Page 47.**

• Four major addresses will be made at joint convention of North and South Carolina crushers associations June 19-20 by **Fred W. Greene**, banker; the Hon. **Harold D. Cooley**, chairman of House Agriculture Committee; **Robert C. Jackson**, American Cotton Manufacturers Institute; and **Dr. John McSween**, minister. **Page 27.**

• **N. Hunt Moore** is new president of Tri-States Oil Mill Superintendents' Association. Vice-president is **Cecil Crawford**; **L. E. Roberts** is secretary-treasurer; and **Jane Inez Gordon** is corresponding secretary. Speakers at Tri-States convention included Moore, Delta Products Co.; **Floyd Bates**, Rose City Cotton Oil Mill; **Cecil Wamble**, Cottonseed Products Research Laboratory; **T. S. Pryor**, The Southern Cotton Oil Co.; **L. L. Ford**, Davidson-Kennedy Co.; **Lucian Cole**, Industrial Machinery Co.; **Thomas W. Hutchinson**, West Tennes-

(Continued on Page 24)

Ginners Met With PMA June 7-8

Meeting in Memphis June 7-8 with Production and Marketing Administration officials, representatives of the ginning industry said the cost to the ginner per ton of seed handled under the cottonseed support program last year amounted to $3 per ton, and asked that the 1950 CCC contract allow the ginner something over and above that figure to meet unexpected expenses and to cover the cost of supervision. Last year the ginner was paid $1.50 per ton of seed handled.

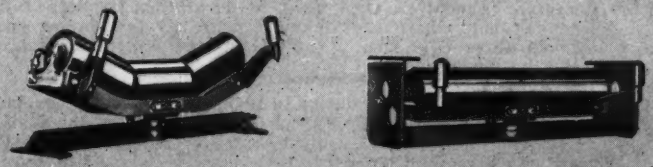
Horace Hayden of Oklahoma City, executive vice-president of the National Cotton Ginners' Association, advised *The Cotton Gin and Oil Mill Press* by telephone June 9 that the contract discussed with the ginners' group at Memphis is yet to be finally approved by PMA and that the price to be paid the ginner for his part in the support program is yet to be determined.

The ginners asked for payment based on the following formula: $3 per ton (the ginner's cost of handling seed), to which would be added 6 percent of the total of the loan or purchase price and the ginner's $3 per ton cost. For example, if the loan price is $46 per ton, the $3 cost per ton would be added, making $49. Take six percent of $49, which is $2.94. Add $2.94 to the ginner's cost of $3 per ton, and you get $5.94 per ton of seed handled. This is the figure the ginners asked for. PMA officials did not, of course, approve the suggested formula offered by the ginners but will give it further study.

PMA indicated the price to be paid the ginner, together with other details, probably will be made public in a week or 10 days.

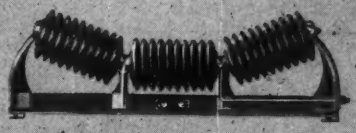
THERE'S A *Continental* IDLER for every purpose

STANDARD DUTY IDLER



SELF-ALIGNING TROUGHING IDLER

SELF-ALIGNING RETURN IDLER



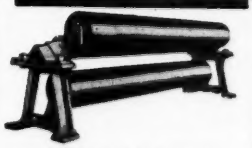
RUBBER DISC IMPACT IDLER

FLAT ROLL

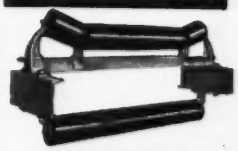
SELF-ALIGNING FLAT BELT IDLER

FLAT BELT IDLER

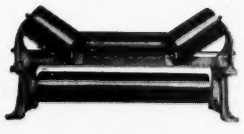
HEAVY DUTY IDLER



GRAIN FLAT BELT IDLER



PICKING TABLE IDLER



GRAIN CONCENTRATOR IDLER

UNIT STAND IDLER

Belt conveyors are used for handling many types of material. For this reason, Continental manufactures a variety of Idlers, each designed to best take care of a particular application.

When ordering your next Belt Conveyor, specify Continental Idlers and take advantage of our complete line.

Most standard size idlers can be shipped FROM STOCK. Other sizes can be shipped promptly.

Specify CONTINENTAL

CG 4804

INDUSTRIAL DIVISION
CONTINENTAL GIN COMPANY
BIRMINGHAM, ALABAMA

ENGINEERS CGC ATLANTA • DALLAS • MEMPHIS • NEW YORK CGC MANUFACTURERS

Photo by The Cotton Gin and Oil Mill Press

THESE MODERN, all-steel buildings at the 300-acre Cotton Research Station at Chickasha were constructed with funds furnished by the Oklahoma Cotton Research Foundation. On the left is the completely equipped machine shop, where the engineering staff works on new and old farm equipment adapted to Oklahoma conditions. Next is the cottonseed storage house, designed to take care of all strains and increases produced at the station. The large building houses a 2-stand gin to be used primarily for ginning rough-harvested cotton, and on the right is the seed cotton storage house.

Cotton Hits the Comeback Trail

(Continued from Page 17)

leading cash crops in Oklahoma. Great opportunity lies immediately ahead for cotton growers and the industry in this state to increase the annual value of the crop. High-quality, high-yielding varieties and further mechanization of growing and harvesting offer the most promise of large production and greater profits. Combination of cotton in a system of balanced farming with other crops and livestock is the other most promising means of advancement in the cotton growing areas in the state.

"Cotton is the key crop around which a rotation of soil-conserving, feed-producing crops can be developed. The happy result will be larger returns from the land, income extended more fully over the year, and a more permanent, prosperous agriculture in the cotton country.

"The cotton and cottonseed industries in Oklahoma, represented by the cotton ginners, cottonseed oil millers and others, are doing a most outstanding job of spearheading, spark-plugging and supporting research, education and other effective efforts toward improvement of the crop and the industry in this state. They are placing their money, many thousand dollars of it, on the line to supplement public funds and round out full budgets for the personnel, buildings, and special equipment required to do a speedy job of improvement across the board of production, processing and marketing.

"The men of keen vision who planned and are executing this program of support, and the sound-minded membership of the entire industry who are supporting their leaders in this forthright drive to push cotton forward fast, merit the strongest praise of all who believe in progressive agriculture."

The Chickasha Research Station

• **Aim: "Best of Its Kind"**—Immediately after organization of the Oklahoma Cotton Research Foundation in 1948, Horace Hayden and other members went to work to see what could be done to aid the research station at Chickasha, which was opened in January of that year. The Foundation, of course, acts only in an advisory capacity, with the College executing the program for cotton. The Experiment Station, which operates the 300-acre Chickasha station, is determined to make it the best of its kind in the country. I. M. Parrott is superintendent and plant breeder, Mack Keathley is assistant plant breeder, Jerome Simmons is farm foreman.

In charge of cotton mechanization work at Chickasha is Robert H. Witt, agricultural engineer with the Agricultural Experiment Station. John J. Wooster is machinist in charge of farm machinery.

• **New Buildings Constructed**—Last year the Oklahoma Cotton Research Foundation put up the money for the construction of several new buildings at Chickasha that are leased to the station. There is a modernly equipped machine shop for work by the engineering staff on new and old farm equipment adapted to Oklahoma conditions; a two-stand experimental gin to be used primarily for ginning rough harvested cotton and which will fit into the Stoneville (Miss.) and Las Cruces (N. M.) gin laboratory setup as a part of USDA's overall ginning research program; a cottonseed storage house designed to take care of all strains and increases produced at the station and to house seed cleaning and treating equipment; and a modernly equipped seed cotton storage house.

The Breeding Program

• **Its Heart Is at Chickasha**—The cotton breeding program in Oklahoma, which for many years was in charge of Henry Dunlavy, who resigned last year to take charge of cottonseed breeding work for Ferris Watson Seed Company, of Garland, Texas, is now handled by John M. Green, agronomist with the Agricultural Experiment Station at Stillwater. Head of the Station's agronomy department is H. F. Murphy.

Heart of the breeding program in Oklahoma is the Cotton Research Station at Chickasha, which is using a total of 36 experimental varieties in its program. Its objectives are (1) to improve techniques through research on breeding methods; (2) to provide better information to growers through expanded variety adaptation studies; (3) to develop diseasse-resistant varieties adapted to mechanical production through (a) utilization of known methods in breeding for disease resistance and (b) incorporation of characteristics important to successful stripping, when possible; (4) to simplify the variety picture in Oklahoma through (a) promotion of production of registered seed of recommended varieties (in cooperation with Oklahoma Foundation Seed Stocks, Inc.), (b) through recommending only the best varieties, and (c) releasing only varieties of cotton that are definitely superior to those already in production.

The variety testing program is being expanded to include 10 locations in 1950, and at one point, Tipton, tests will include both irrigated and dry-land locations.

• **The Goal Is 300 Pounds Per Acre**—The goal of 300 pounds of lint per acre for Oklahoma seems modest enough when results of variety tests at four stations in 1949 and average yields for those stations for the four-year period 1946-49 are studied. At Tipton, for example, in 1949 the highest yield of 28 varieties tested was 742 pounds and the lowest 505. Highest yield for the four-year period at Tipton was 397 pounds, the lowest 326. At Lawton, highest yield of 19 varieties tested last year was 337 pounds, the lowest 272. Four-year high was 265 pounds, the lowest 216. At Chickasha, of 36 varieties tested, the highest yield was 720 pounds, the lowest 496. Four-year high was 424, the lowest 349. At Perkins in 1949, of 33 varieties tested, highest yield was 381 pounds, the lowest 147.

Four-year high at Perkins was 299 pounds, lowest 164.

Oklahoma Agricultural Experiment Station Bulletin No. B-343 (Jan. 1950), *Cotton Varieties for Oklahoma*, says that results of tests at Tipton, Lawton, Chickasha, and Perkins from 1944 to 1948 show the following varieties best adapted to Oklahoma conditions: for Western Oklahoma, Mebane 6801, Lockett 140, Lankart 57, Northern Star, and Stormproof No. 1; for Central Oklahoma, Stoneville 62, Deltapine 15, Mebane 6801, Lockett 140, and Lankart 57; for Eastern Oklahoma, Stoneville 62, and Deltapine 15.

There is still other evidence that the 300-pound-per-acre goal should not be difficult to reach. In 1949, for example, 10 of the Stoneville 62 contract growers for Ferris Watson Seed Company—all located at Maysville—produced 208,815 pounds of lint cotton on 267.35 acres, an average of 781.05 pounds per acre. The acre yields of the 10 growers ranged from a high of 2.32 bales per acre on the L. R. Hewett farm to 1.32 bales on the Burl Roberts farm.

• **Irrigation Increases Yields 334 Pounds**—In making a report on irrigation studies at the convention of the Oklahoma Cotton Ginners' Association in January of this year, I. M. Parrott of the Chickasha station said irrigation increased cotton yields at the Tipton station an everage of 334 pounds of lint per acre annually during the 11 years from 1938 to 1948. Seed yields were increased proportionately. The number of irrigations ranged from none to four per year, depending on rainfall. Cost of irrigation (labor and power only), Parrott said, averaged approximately $1 per acre per irrigation; and for each dollar spent for irrigation an additional $8.63 worth of lint was produced.

• **Pure Seed Production**—Last year, in a move to increase and distribute breeders seed developed by the Experiment Station and others, an organization known as Oklahoma Foundation Seed Stocks, Inc., was set up as a sub-division of the A. & M. College. The corporation, whose activities are governed by a board composed of Experiment Station and Extension Service personnel, plans to begin pure seed production on two of the Oklahoma cotton varieties, Stoneville 62 and Mebane 6801. When new varieties developed by Experiment Station breeders prove worthy of distribution, the Foundation Seed Stocks organization will have the machinery for increasing supplies of seed in a short time. E. S. Oswalt, secretary-manager of the new organization, says it is hoped that it will fill the gap between the plant breeders and the farmer-growers.

• **Mechanization Essential**—Increasing acre yields in Oklahoma is absolutely essential if the state is to stay in profitable cotton production, but mechanization is just as important as a means of lowering production costs to a point where the grower can produce cotton profitably. W. J. Oates, agricultural engineer at the Experiment Station in Stillwater, is in charge of this phase of the program. E. W. Schroeder is head of the agricultural engineering department.

The cotton mechanization project in Oklahoma got its start in 1947, but the first planned work was begun in 1948. It is divided into the following phases—1. Planting: comparison of different methods of planting to determine their effect on stand, grass and weed control, yield and havesting efficiency; 2. Harvesting: (a) the mechanical characteristics of different types of mechanical harvesters to determine their limitations and adaptability to the Southwest plains; (b) the relationship of mechanical harvesting to the varietal characteristics of cotton; (c) the effectiveness of auxiliaries and accessories on harvesting mechanisms; (d) integration of the mechanization of cotton production and harvesting with the mechanization of other crops.

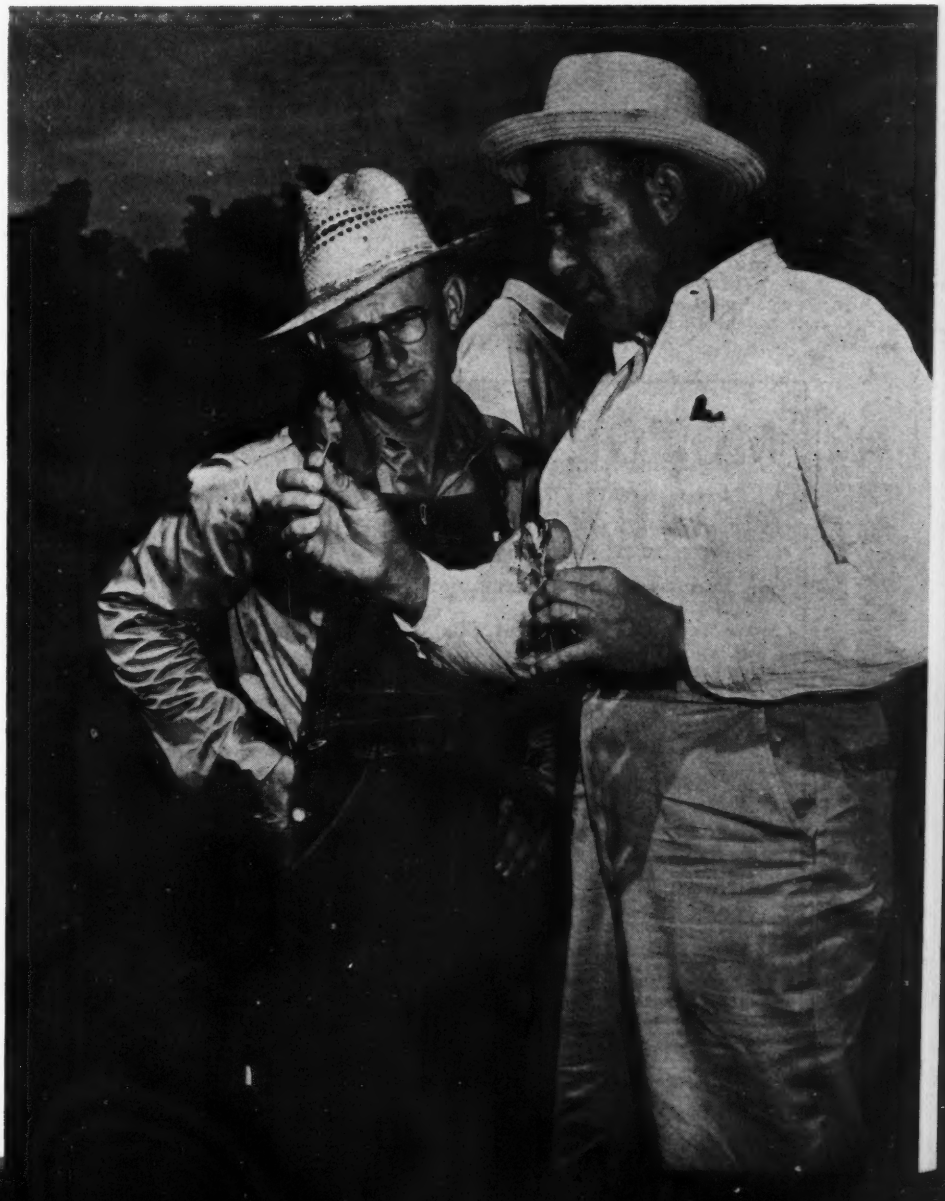
• **Tests in 1949**—Last year Oates and his staff laid out tests on both of these phases of the program. "The main purpose of these tests," Oates said, "was to determine certain basic or fundamental principles which influence the behavior of a mechanical harvester." To eliminate and to minimize variations or variables, one variety of cotton was used for all spacing tests. Plots were randomized and replicated four times. Some plots were hill dropped and some drilled. Spacing, Oates reported, varied from six inches to 32 inches and two rates of planting were used. In one, it was attempted to get two seeds per hill; in the other, three seeds per hill.

"When we attempted to plant these tests," Oates said, "it was soon apparent that seed must be graded to a specific size if we hoped to control the rate with any degree of accuracy. This was done, but in rather a crude manner. Next, it was evident that we didn't have a planter that would place seed as accurately as we desired, so we constructed one combining features of two commercial planters and some of our own ideas. We obtained a high degree of accuracy, both in rate and spacing, and found that the stand obtained was more uniform than

(Continued on Page 50)

ONE OF THE 22 owner-operated demonstration farms in the Experiment Station's 1949 program designed to stimulate interest in better farm practices was that of Ira (Mike) Johnson of Dill, in Washita County. Johnson (left) is shown with Jim Tomlinson observing insect damage in a field of cotton on his farm. Tomlinson, who is in charge of the owner-operated farm demonstrations for the Experiment Station, lives at Anadarko and is doing a fine job with this phase of Oklahoma's new cotton improvement program.

Photo by The Cotton Gin and Oil Mill Press



People in The Press

(Continued from Page 20)

see Soya Mill; **J. L. Tennent, Jr.,** Refuge Cotton Oil Co.; **Harry Southall,** Union Oil Co.; **Frank Quinn,** Minter City Oil Mill. **Page 34.**

• **Gordon Marks,** secretary, announces that Louisiana-Mississippi ginners will hold separate state conventions this year, with **John E. Ross, Jr.,** agricultural economist at Stoneville, as a featured speaker at the Louisiana meeting June 21. Mississippi ginners will meet July 16-17 following mechanization conference. **Page 19.**

• **Charles D. West** and **J. S. LeClercq, Jr.,** form a new brokerage partnership in cottonseed and soybean products. **Page 30.**

• The season's first bale is grown by **Pablo Rivera,** ginned by **H. H. Farley** and **W. J. Williams.** **Page 24.**

• Archer-Daniel-Midland names **Gene Fowler** advertising manager, V-P **J. W. Moore** announces. **Page 45.**

• **Ralph Prater** of Prater Pulverizer died May 25. **Page 49.**

• Oklahoma's Bale-an-Acre Club gets new additions in **Z. R. Hewett** and **Claud Pyle** of Maysville. **Page 24.**

• **Burris C. Jackson,** chairman, State-Wide Cotton Committee of Texas, announces theme of 1950 Cotton Research Congress. **Page 24.**

• Texas ginners in the state association's Districts 11 and 12 will hold regional meeting at Sinton June 15 with President **Dick Gerdes** presiding. **Page 45.**

MOTOR RE WINDING PAIRING BUILDING

DAYTON V-Belts and Drives

Spare Motors for Gins and Oil Mills

Member

DIAL 6898
(Night: 6759)

New and Used Motors

LUBBOCK ELECTRIC CO.

1944 Texas St. Lubbock, Texas

• **Arkansas-Missouri** ginners adopt three important recommendations made by President **Sidney C. Mack** at June 5-6 convention. **S. Crews Reynolds** was re-elected vice-president and **J. Warren Karsten, Jr.,** executive vice-pres.-secy.-treas. The ginners heard talks by **Read Dunn, Jr.,** National Cotton Council; **W. O. Fortenberry,** National ginners president; Congressman **Paul C. Jones** (Mo.); **Willis H. Willey,** Southern Cotton Shippers Association; **Jimmy Arrington,** humorist. The following ginning and fiber specialists participated in a panel discussion: **Charles M. Merkel, Francis L. Gerdes, Harry E. Beasley, Alfred M. Pendleton.** **Page 44.**

Oklahoma Bale-an-Acre Club Gets Additions

One hundred five cotton farmers in eight counties of Oklahoma had their names added last week to the "bale-an-acre" club. In order to become a member of the club a farmer must produce at least a bale of cotton per acre on his entire acreage.

The bale-an-acre contest is sponsored by the Oklahoma Cottonseed Crushers' Association and the Oklahoma Cotton Ginners' Association, in cooperation with the extension division of Oklahoma A. & M. College.

"The production contest is just one phase of the cotton improvement program being carried on by cotton interests and the college," says J. D. Fleming, agronomist in charge of cotton. The bale-an-acre contest will be continued in the present cotton growing season.

Topping all of the producers who entered their production records in the contest was L. R. Hewett of Maysville, with 2.32 bales of cotton per acre, or 1,113.5 pounds of lint cotton. Only one other grower matched Hewett's feat of producing as much as two bales per acre, and that was another Garvin County farmer, Claud Pyle of Maysville.

Hewett, who farms 130 acres of land along the Washita River south of Maysville, grew 12 acres of cotton last year, averaging the 2.32 bales per acre on the entire 12 acres. He grows Stoneville 62, a variety of cotton developed at Oklahoma A. & M. College for Oklahoma climatic conditions.

He says that thorough cultural practices, proper soil management, a systematic insect control program, and a good variety of cotton for his part of the state are factors figuring heavily in his unusually high production last season.

Livestock Weekly Reprints NCPA Feeding Circular

Dairymen of the Mississippi Valley area and nearby states received timely information on feeding cottonseed meal and hulls through the June feature issue of *The Livestock Weekly,* published in Memphis.

The publication reprinted feeding information contained in the circular "Feeding to Produce Milk at Less Cost," published by the Educational Service of the National Cottonseed Products Association. Approximately 30,000 copies of this circular have been distributed in recent weeks by oil mills and the Educational Service office.

"Cotton's Vital Role" Is Cotton Congress Theme

At a meeting of the Cotton Research Congress committee in Dallas June 7, the theme "Cotton's Vital Role" was selected for the eleventh annual Congress to be held at Dallas July 27-28. Burris C. Jackson, Hillsboro, chairman of the State-Wide Cotton Committee of Texas, sponsoring organization, presided.

Plans were made at the committee meeting to bring to the Congress business, labor and farm organization leaders of national repute to take part in the business sessions. Research and Production will be the theme of the morning session July 27; the afternoon session will deal with Current Problems in Merchandising American Cotton.

The night session July 27 will be divided into two parts. One is to be in charge of scientists from the Southern Regional Research Laboratory at New Orleans; home demonstration women of the Texas Extension Service will be in charge of the other.

The business session July 28 will revolve around a discussion of cotton's role in the national economy. A complete list of speakers will be announced later. Sessions will be held at the Baker Hotel.

First Bale Arrives— Ahead of Schedule

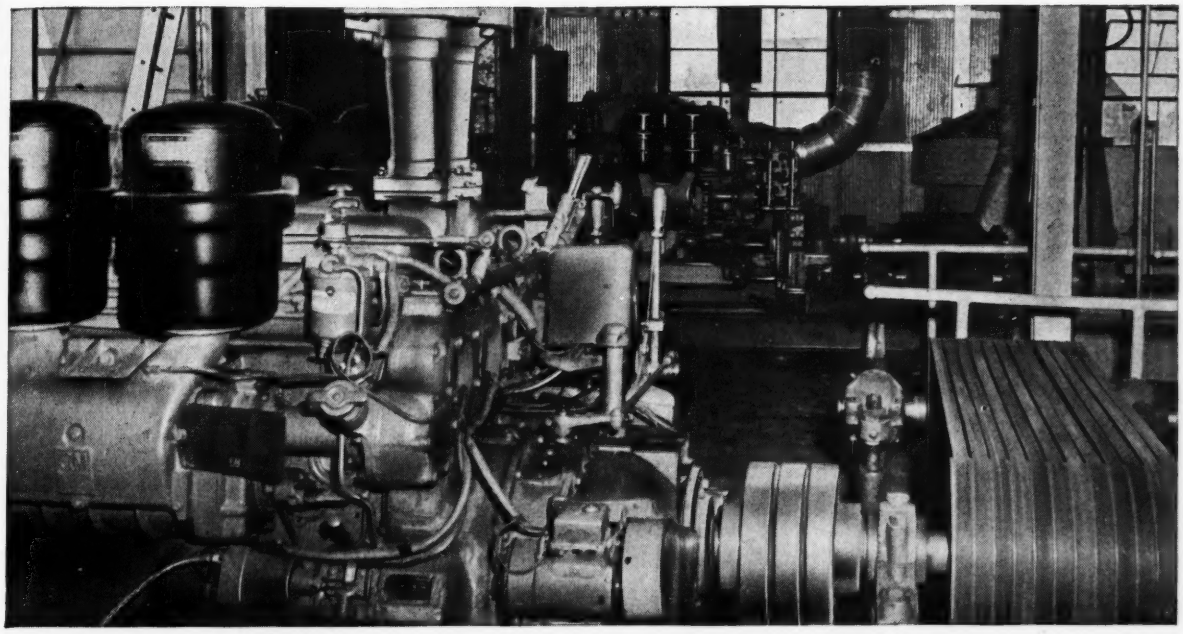
First bale of 1950 cotton was ginned at the Farley-Williams Gin, McAllen, Texas, May 31 and rushed to Houston for sale the same day, some two weeks ahead of the usual date.

Grown by Pablo Rivera, La Grulla, Starr County, the bale was picked from a field which had been defoliated to speed maturity. Rivera, who won the annual "first bale" race in 1948, finished picking at 8 a.m. May 31, after 20 straight hours of work for his family, and rushed the cotton to the McAllen gin about 30 miles away. At 10:30 a.m. he and George Scheafer of the gin firm loaded the bale on one of the gin trucks and began the 350-mile race to Houston, where the bale was delivered on the floor of the Houston Cotton Exchange at 3:45 p.m. Rivera received $1,260, or $2.10 a pound, for the 600 pound Middling 1-1/32-inch staple bale, plus a bonus of $1,325, the highest price ever paid for a first bale.

To insure against delays on the run to Houston, a second truck followed the one carrying the bale. In it were H. H. Farley, Rossville, Tenn., and his son-in-law, W. J. Williams, Collierville, Tenn., operators of the gin at McAllen.

The bale was the second earliest ginned on record, the only earlier one having been ginned on May 26, 1921, from over-wintering cotton. Rules of the "first bale" contest require that the bale be from new crop cotton containing no volunteer growth.

One Good "Twin" deserves another



Two GM Series 71 Diesel "Twin" sixes, installed by Lewis-Diesel Engine Co., Memphis, drive a double battery of Continental Gin stands.

Shown here are two General Motors Series 71 Diesel "Twins" powering the brand-new plant of Citizens Gin Company, Wardell, Missouri.

The first engine went to work at the beginning of the 1948 season—ginned 4,500 bales in 45 consecutive days—and more than 9,000 bales during the season—at a total power cost of 37¢ per bale. No power trouble of any kind. No loss of operating time.

With such a record, it's easy to see why O. H. Acom, Citizens Gin Company president, chose a second GM Diesel "Twin" when he installed new gin stands and the latest cleaning and drying equipment in his new plant.

Cotton ginners everywhere rely on these powerful 2-cycle Diesels because they start fast, pinch pennies on fuel and stick to the job with little attention.

Learn how a GM Diesel can lower your ginning costs—get the full facts from your distributor or write direct to us.

DETROIT DIESEL ENGINE DIVISION

SINGLE ENGINES . . . *Up to 200 H. P.* **DETROIT 28, MICHIGAN** MULTIPLE UNITS . . . *Up to 800 H. P.*

GENERAL MOTORS

GM GENERAL MOTORS DIESEL POWER

DIESEL BRAWN WITHOUT THE BULK

E. F. Craven Company, GREENSBORO, NORTH CAROLINA
George Engine Co., Inc., HARVEY, LOUISIANA
Equipment Supply Company, Inc., EL PASO, TEXAS
Empire Machinery Co., Ltd., ODESSA, TEXAS
Alabama Machinery & Supply Co., MONTGOMERY 1, ALABAMA
Lewis-Diesel Engine Company, MEMPHIS 2, TENNESSEE
Diesel Power Co., OKLAHOMA CITY, OKLAHOMA
Nixon Machinery & Supply Co., Inc., CHATTANOOGA 1, TENNESSEE
Taylor Machine Works, JACKSON, MISSISSIPPI
Stewart & Stevenson Services, Inc., HOUSTON 1, TEXAS
Haynes Machinery Co, PLAINVIEW, TEXAS
Blalock Machinery & Supply Co, ATLANTA 2, GEORGIA
Armstrong Equipment Co., BIRMINGHAM 1, ALABAMA
Bell-Lott Road Machinery Co, WEST COLUMBIA, SOUTH CAROLINA
Taylor Machinery Services, Inc., MONROE, LOUISIANA

At Hotel Buena Vista—

Mississippi Crushers to Meet in Biloxi June 14-15

ED LIPSCOMB of the National Cotton Council, Memphis, and the Hon. Leander H. Perez of New Orleans will be featured speakers at the forty-first annual convention of the Mississippi Cottonseed Crushers Association June 14-15, according to the program announced by Secretary J. A. Rogers.

E. L. PUCKETT
President, Mississippi Cottonseed Crushers Association, Amory.

• **Convention to Be Held in Biloxi**—The convention will be held at Biloxi, Miss., with headquarters in Hotel Buena Vista.

• **Registration June 14**—The registration desk will be in the lobby of the Buena Vista, Rogers said. He urged all members of the association and their guests to register promptly on arrival.

J. A. ROGERS
Secretary, Mississippi Cottonseed Crushers Association, Jackson.

J. B. PERRY, JR.
Vice-president, Mississippi Cottonseed Crushers Association, Grenada.

• **Lipscomb Will Speak June 15**—Lipscomb, who is director of public relations for the National Cotton Council, will make the principal address Thursday morning, June 15. His subject has not been announced.

• **Judge Perez to Address Convention June 16**—Judge Perez will speak to the Mississippi crushers on the morning of June 16. He is chairman of the National Educational Committee of States Rights Democrats and is expected to talk on matters of current national interest.

• **Entertainment** — The entertainment program for the Mississippi meeting will begin with a barbecue June 14 at Buena Vista Beach. Crushers and their guests will convene on the beach at 7 p.m. for the barbecue.

A ladies' luncheon will be held at 11 a.m. June 15 in the Hurrican Room of Hotel Buena Vista.

• **Annual Dinner-Dance** — A cocktail party at 7 p.m. June 15 in the Hurrican Room will precede the annual dinner-dance ending the convention of the Mississippi crushers. A buffet dinner will be served at 8 p.m., followed by dancing.

• **Officers**—Officers of the Mississippi Cottonseed Crushers Association are E. L. Puckett, Amory, president; J. B. Perry, Jr., Grenada, vice-president; and J. A. Rogers, Jackson, secretary.

• Pasture grasses protect productive topsoil from wind and water erosion, hold moisture in the soil and help restore and maintain organic matter.

Delta Council Proposes Ginning Shortcourse

Problems concerning preparation of cotton at the gin and its relation to cotton quality were discussed at Greenwood, Miss., June 2 by members of the Delta Council Cotton Economics Committee.

It was agreed that a recent indictment of ginning research and new equipment made by a group of mill cotton buyers was not justified in the light of research findings. Cotton spinners do have some legitimate complaints, however, and it was unanimously agreed that steps should be taken to correct malpractices and to improve the quality of cotton delivered to the mills.

Excessive heat, over-machining of cotton in the cleaners and extractors, and fast ginning were discussed as more prevalent abuses. It was pointed out, however, that damage due to fast ginning was sometimes less serious than weather damage which might occur from the interruption of the regular flow of cotton to the gin. Cotton deteriorates in the field at the rate of about one grade per month and even faster under adverse weather conditions.

Maury Knowlton, Perthshire, Miss., chairman of a specially appointed subcommittee on ginning improvement, submitted the following report from his subcommittee which met in the morning:

"We wish to point out that a great deal of good ginning is being done by Delta ginners over the entire area. At the same time, we wish to recognize that a relatively poor job of ginning is also being done in many instances.

"It is our desire as cotton producers and ginners to supply cotton manufacturers with cotton to fill their requirements and to maintain the quality of this cotton to the fullest extent practical.

"Therefore we recommend that the following action be taken:

"1. That the Mississippi Extension Service and Delta Council make a concerted effort to initiate a ginning shortcourse for gin operators and owners of the Delta area and that this shortcourse be held before the 1950 ginning season.

"2. That a comprehensive long-range program to train gin operators be initiated by Mississippi State College, Mississippi Extension Service and gin manufacturers.

"3. We recommend that cotton producers of the Delta study the possibility of developing farm storage facilities to help alleviate the peak season load to the cotton gin so that cotton can be ginned at the proper speed instead of too fast.

"4. We also urge that cotton producers exert every effort to deliver cotton to the gin in good condition.

"5. Gin manufacturers are requested and urged to provide technical information, assistance and advice to promote the more efficient operation of gin equipment by sending qualified men to gins during the ginning season and by providing adequate printed technical instructions pertaining to their equipment.

"6. Ginners are urged to keep in close contact with their cotton classers, such as government classing offices, Staple Cotton Association, cotton factors and merchants, with the objective of obtaining information necessary to overcoming quality defects insofar as harvesting and ginning are concerned."

Joint Meeting June 19-20—

North and South Carolina Crushers at Myrtle Beach

COMPLETED program for the joint annual convention of the North Carolina Cottonseed Crushers Association and the South Carolina Cotton Seed Crushers' Association at Myrtle Beach, S. C., June 19-20 has been released by Mrs. M. U. Hogue, secretary-treasurer of the North Carolina crushers, and Mrs. Durrett L. Williams, treasurer of the South Carolina association.

Registration will begin in the Ocean Forest Hotel, headquarters for the meeting, at 2 p.m. Saturday, June 17, and will continue Sunday afternoon, June 18, from the same hour. The registration

W. T. MELVIN
President, North Carolina Cottonseed Crushers Association, Rocky Mount.

desk will be open at 9 a.m. Monday, June 19, for the convenience of late arrivals.

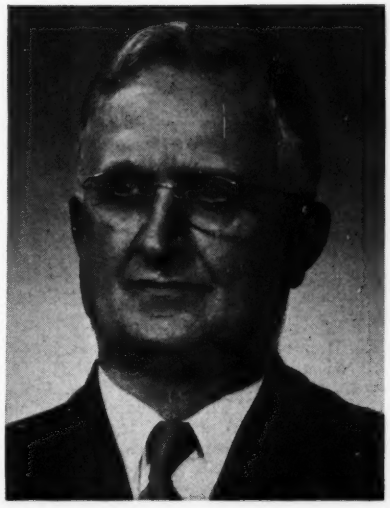
• **W. T. Melvin Will Open Convention**—The convention will be opened at 9:45 a.m. June 19 by W. T. Melvin, president of the North Carolina association, who will preside at the business session that morning.

The Rev. Eugene West, pastor of the Church of the Messiah at Myrtle Beach, will give the invocation.

• **Fred W. Greene to Be a Speaker**—Four major addresses will be given during the joint convention, the first by Fred W. Greene, executive secretary of the North Carolina Bankers Association, Raleigh, who will talk on the subject "Visibility Fair—Ceiling Limited."

Mr. Greene will be followed by a break in the business session for entertainment by Barbara Lee, Winston-Salem, N. C., who will give several vocal selections. She will be accompanied by Sara Honeycutt, Shelby, N. C.

• **Congressman Cooley Will Address Convention**—Final speaker on the opening day will be the Hon. Harold D. Cooley, congressman from the Fourth District of North Carolina and chairman of the House Agriculture Committee. He will talk on "American Agriculture—In a Troubled World."



R. M. HUGHES
President, South Carolina Cotton Seed Crushers' Association, Greer.

• **R. M. Hughes Will Preside June 20**—Presiding at the second day's session will be R. M. Hughes, president of the South Carolina association, who will report to the delegates.

• **Robert C. Jackson to Make Address**—Robert C. Jackson, executive vice-president of the American Cotton Manufacturers Institute, Charlotte, N. C., will speak to the crushers at the final session on a subject yet to be announced.

• **Dr. McSween to Give Final Speech**—"Keeping Our Balance" is the title of the final address of the convention, which will be made by Dr. John McSween, pastor of the Fourth Presbyterian Church, Greenville, S. C.

The joint meeting of the two associations will adjourn after Dr. McSween's talk to attend to association business in separate sessions.

• **Entertainment**—Many members of the North and South Carolina groups are expected to arrive in Myrtle Beach on Saturday preceding the convention to spend the weekend surf bathing, golfing and enjoying the beautiful Brookgreen Gardens.

Ladies attending the convention will have a luncheon at 12:30 p.m. June 19 on the Terrace of the Ocean Forest Hotel. Bingo will be played on the Terrace that afternoon.

That night at 7:30 the annual banquet and dance will begin in the Ocean Forest. R. L. Patton, humorist, will make the after-dinner speech.

MRS. DURRETT L. WILLIAMS
Treasurer, South Carolina Cotton Seed Crushers' Association, Columbia.

• **Golf Tournament** — Play will be by foursomes in the golf tournament to be held June 19 at Pine Lakes Inn. Winter rules will apply, R. G. Eubanks, Charlotte, chairman of the golf committee, has announced. Play will begin at 1:30 p.m. under U.S.G.A. rules.

• **Committee Chairmen** — Heading the various committees in charge of the convention are L. M. Upchurch, Raeford, N. C., program; O. L. Stubbs, Fayetteville, N. C., bingo; T. F. Bridgers, Wilson, N. C., entertainment; and Eubanks, golf.

MRS. M. U. HOGUE
Secretary-treasurer, North Carolina Cottonseed Crushers Association, Raleigh.

• **Officers**—Officers of the North Carolina Cottonseed Crushers Association are W. T. Melvin, Rocky Mount, president; Paul Keller, Clayton, vice-president; and Mrs. M. U. Hogue, Raleigh, secretary-treasurer.

The South Carolina Cotton Seed Crushers' Association is headed by R. M. Hughes, Greer. Mrs. Durrett L. Williams, Columbia, is treasurer.

June 15-17 Are Dates of

National Superintendents Convention in Dallas

OIL MILLING METHODS in Mexico as well as in various parts of the U.S. will be discussed at the fifty-sixth annual convention of the National Oil Mill Superintendent's Association to be held in Dallas June 15-17. Headquarters will be at the Adolphus Hotel.

Business sessions of the convention will be held in the Roof Garden of the hotel, and the registration desk will be

J. RALPH HUNEYCUTT
President, National Oil Mill Superintendents' Association, Pine Bluff, Ark.

open there at 8 a.m. June 15 and 16. Business sessions will be held in the mornings, and delegates will be free during the afternoons. There will be no machinery exhibits this year.

• **Wortham Power to Open Convention**—The meeting will be called to order at 9:30 a.m. June 15 by Wortham Power, Dallas, president of the Oil Mill Machinery Manufacturers and Supply Association, which meets at the same time and acts as hosts for the superintendents' convention.

Responding to the official welcome from the City of Dallas will be F. O. Davis, Fort Worth, Texas, vice-president of the National Oil Mill Superintendents' Association, and R. A. Hawley, Fort Worth, vice-president of the machinery manufacturers and supply association. Mr. Power will then present the gavel to J. Ralph Huneycutt, Pine Bluff, Ark., president of the superintendents' organization, who will give his annual address and appoint committees for the convention.

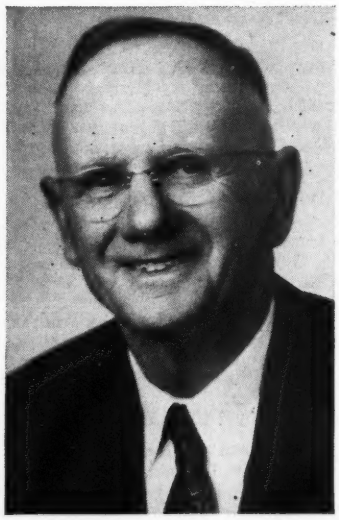
• **Ryan and Crossno to Talk on Association**—At the opening session R. D. Ryan, Producers Cotton Oil Co., Fresno, Calif., will speak on "What the Association Means to the Industry" and H. F. Crossno, California Cotton Oil Corp., Los Angeles, will talk on "Our Divisional Meeting in Fresno" of the West Coast Superintendents Section this spring.

• **E. R. Cousins to Discuss Sesame as Southern Oilseed Crop** — "Sesame—A New Oilseed Crop for the South" will be the subject of an address by E. R. Cousins of the Oil and Oilseed Division, Southern Regional Research Laboratory, New Orleans, which is scheduled to come between the talks by Ryan and Crossno.

• **Davis to Describe West Coast Style Cottonseed Oil Milling**—W. G. Davis, Jr., Western Cottonoil Co., Los Angeles, will be the first speaker at the second morning session June 16. He will discuss "Cottonseed Oil Milling, West Coast Style."

• **N. H. Moore to Talk on Processing**—Colored slides will be used by N. H. Moore, Delta Products Co., Wilson, Ark., in his talk on "The Economies of the Exsolex Process." Moore is vice-president of the Tri-States Oil Mill Superintendents Association.

• **Kime and Wamble to Discuss Research Activities** — "The Advancing Utilization

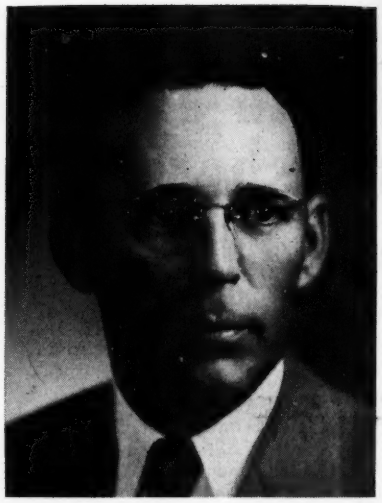


H. E. WILSON
Secretary-treasurer, National Oil Mill Superintendents' Association, Wharton, Texas.

of Southern Farm Crops" is the title of an address to be given by James A. Kime, assistant to the director of the Southern Regional Research Laboratory, during the second session.

A. Cecil Wamble, manager of the Cottonseed Products Research Laboratory, College Station, Texas, will give "A Progress Report of the Activities of the Cottonseed Products Research Laboratory This Past Year."

• **West Texas Solvent Extraction to Be Brawner's Topic**—J. H. Brawner, Western Cottonoil Co., Abilene, Texas, will speak on "Our General Experience in Solvent Extraction in West Texas."



F. O. DAVIS
Vice-president, National Oil Mill Superintendents' Association, Waxahachie, Texas.

• **Baldwin to Talk on Linters**—"Linters for Cellulose" is the subject to be covered by W. D. Baldwin, Hercules Powder Co., Memphis.

• **Oil Milling in Mexico to Be Topic** — Final address on the second day will be made by Salvador F. Rojas, superintendent of Distribuidora de Algodones, S. A., Gomez Palacio, Durango, Mexico, whose tentative subject is "The Oil Milling Industry in Gomez Palacio."

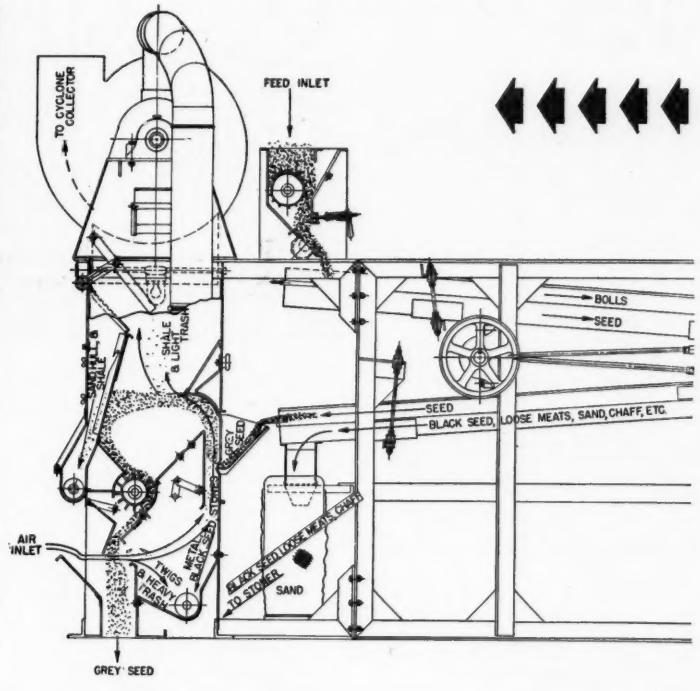
• **Final Business Session**—Following the annual report of Secretary H. E. Wilson at the beginning of the final session June 17, two speakers will bring the convention to a close. They are C. C. Castillow, Refuge Cotton Oil Co., Greenville, Miss., and a representative of USDA's Production and Marketing office in Dallas, whose subjects have not yet been announced. Committee reports and election of officers will conclude the session.

• **Entertainment** — Entertainment features of the convention are scheduled for Friday, June 16. A ladies' luncheon in the Century Room of the Adolphus and a luncheon session of the 25-Year Club in a private dining room will be held at noon that day. The annual dinner dance will take place at 7 p.m. in the Roof Garden.

• **Entertainment Committee**—A. G. Falk, Dallas, is chairman of the convention entertainment committee, which includes Power and Hawley. They are secretary-treasurer, president and vice-president, respectively, of the Oil Mill Machinery Manufacturers and Supply Association.

• **Officers**—Officers of the National Oil Mill Superintendents' Association are J. Ralph Huneycutt, Pine Bluff, Ark., president; F. O. Davis, Fort Worth, Texas, vice-president; and H. E. Wilson, Wharton, Texas, secretary-treasurer.

COMPLETE PARTS LISTS AND DRAWINGS ON THE
NOW
NO. 199 CLEANERS ARE AVAILABLE UPON REQUEST.



DOES YOUR CLEANER DO ALL THESE THINGS?

Does it get rid of sand? (You know that sand is rough on linter machines and presses.)
Does it grab out the tramp iron?
Does it screen out bolls and large debris?
Does it pull out dust, chaff, shale?
Does it make the lint clean, as your customers want it?

We can help you answer yes to all these questions if you have a Bauer No. 199 Cottonseed Cleaner. The diagram shows the magnetic, mechanical, and pneumatic treatments which cottonseed gets in the No. 199.

Good as the cleaner was before, the latest model has a number of new features. One of them is the built-in permanent magnetic separator. Here are some others:

Improved and heavier antifriction bearings.

Flanged metal screens in rubber mounted shakers.

Completely guarded discharge roll.

Ready access to lighted aspiration chamber for minor adjustments.

Cleaner frame-work design.

Catwalk with ladder for easier servicing of upper decks.

Single feeder control unit for multiple installations.

The photograph reproduced at the right isn't very sharp, but it shows three Bauer Cottonseed Cleaners in a typical installation. If you want complete information on the cleaner, ask for Bulletin O-2B.

THE BAUER BROS. CO., 1702 Sheridan Ave., Springfield, Ohio

REPRESENTATIVES:

M. Neumunz & Co., Inc., 90 West St., New York 6, N. Y.; M. B. Sell, Dallas, Ga.; Industrial Supplies, Memphis, Tenn.; R. R. Dill, 468 Prairie Ave., Elmhurst, Ill.; C. C. Cantrell, 2541 Greene Ave., Fort Worth, Tex.; Kenneth Wylie, Eugene, Ore.

From our Washington Bureau

By FRED BAILEY
and JAY RICHTER
Washington Representatives
The Cotton Gin and Oil Mill Press

BAILEY

RICHTER

• **Economic Situation** — Washington economists are warning against undue optimism about recent commodity price increases. The upward movement is not expected to hold through the rest of the year.

Most observers are betting that prices will move a little lower in the last half of 1950 . . . or, at best, hold steady.

Strong speculative activity in the markets is expected to taper off.

USDA's Bureau of Agricultural Economics reports that the farm price index on May 15 was at the highest level than at any time since September, 1949. There was a two percent gain in prices between last April 15 and May 15, a sharp increase for a single month.

Cotton led the advance, along with livestock, wool, soybeans and corn.

Most officials think cotton has been overpriced in recent weeks. A decline in both export and domestic consumption is anticipated next season, although predictions for postwar record consumption and exports this season are not being changed.

Cotton acreage this year looks to be about 21 million acres. With normal yield that would mean a crop of 11 to 11½ million bales, or about equal to expected domestic consumption and export in the year ahead. Carry-over next Aug. 1 will be between seven and eight million bales.

Oilseeds, as well as cotton, have been overpriced, in the official view. Soybeans recently were at the highest point in two years, and government men have been predicting early declines of at least 50 cents per bushel.

Government forecasters are hedging their bets on future commodity prices by citing weather and crop uncertainties. Worsening crop conditions could keep prices at or above present levels. The government experts base their appraisal on the assumption that over-all farm production will be about normal—but below recent years.

• **Fats and Oils Import Picture**—Present limitations on fats and oils imports into this country . . . due to expire June 30 . . . probably will be extended, but there are strings.

First, final approval, assuming it comes, is likely to be held up until just before the deadline.

Second, the extension may be for only one year, instead of two, as called for originally in an amendment sponsored by Iowa's Sen. Guy Gillette. That amendment, approved by the Agriculture committee and referred to the Senate committee on Banking and Currency, has now been included in a bill (S. 3550) sponsored by Sen. Burnet Maybank of South Carolina.

Maybank, chairman of the Banking committee, framed his bill to extend the import limitations for a single year. Tung oil producers, up in arms over Chinese imports, are protesting.

There is some possibility that Maybank may revise his bill to make the continuation for two years. Another possibility is that the lower house may insist on the longer limitation period when and if the issue goes to a conference committee of both houses.

Any way you look at it, commented one Capitol Hill insider, the fats and oils extender "looks like one of those things that won't be acted on until June 29."

• **USDA Research Setup to Be Studied**—Cotton interests here are pushing for a hard-headed appraisal of the Agriculture Department's entire research setup. Main trouble, they complain, is that there is at present no way of telling "which USDA agency is getting federal dollars to do what."

The National Cotton Council and other agricultural groups are to cooperate closely with the House Agriculture committee in its study of USDA administration of the 1946 Research and Marketing Act.

Lawmakers are planning a thoroughgoing inquiry, probably to extend over a period of several months. Back of the investigation lies the belief that the Department has been too slow in adapting itself to stepped-up study of marketing problems.

The inquiry, some think, may reveal that special funds appropriated under the Act for new research have been ladled out to USDA agencies to supplement work already being financed with regular research funds.

The House Appropriations committee already has sharply criticized what it regards as failure of the Department to stress marketing studies—and for failure to contract sufficient work with private agencies for market research.

A special subcommittee of the Agriculture committee, headed by Rep. Stephen Pace of Georgia, is to conduct the inquiry. Howard Doane of St. Louis has been named to head a task force to dig out the facts. Farm group representatives will assist in the inquiry.

• **Agriculture's Job—If War Comes** — You won't hear much talk about it, but a complete blueprint is being drawn up in Washington outlining the responsibilities of agriculture in the event of war.

In over-all charge is W. Stuart Symington, former Air Force Secretary, and now head of the National Security Resources Board. The Board, now little publicized, probably would become a combined War Production Board, OPA, and central economic strategy group if war were to come.

As Symington and his planners see it now, controls over production would be few, in case of war. The land would be pushed to the limit, with soaring demand for all fibers and most foods.

On the other hand, controls over prices and use of products of the farm would be strict—probably much more so than in the late war. Food and fiber would be carefully rationed, and there would be a stringent priority system limiting purchases and use of machinery, equipment, and supplies.

Farmers probably would be given high price-support guarantees to insure against postwar collapse . . . but there would be no need for them in wartime.

• **World Cotton Prices—Too High**—This government, at least for the time being, is dodging the question of whether there should be an international cotton commodity agreement, similar to the world agreement now in effect for wheat.

The issue was discussed in Washington during the recent conference of the 25-nation International Cotton Advisory Committee. The U.S. government said it would be willing to discuss an international agreement, but made it clear we aren't yet ready to underwrite such a deal.

Real hitch now, in working out an agreement, would be the objections of consuming countries. Their representatives at the conference made it clear they think present world prices are too high for an agreement to work.

General consensus was that world prices are now of first importance, and must be brought down. Rayon prices outside the U.S. are about 35 percent less than cotton.

West-LeClercq Co., New Partnership, Formed

Announcement was made this week by Chas. D. West, of West Commission Co., Dallas, brokers in cottonseed and soybean products, that he has formed a new partnership with J. S. LeClercq, Jr., of Dallas, to be known after July 1 as West-LeClercq Co. Offices will be at 103 Cotton Exchange Building in Dallas, and phone numbers will be Prospect 7-1620-29 and CEntral-2547. The firm will continue to do a brokerage business in cottonseed oil, cake and meal, hulls and linters, and soybean oil and cake and meal.

West has been engaged in the brokerage business in Dallas and Houston for the past 30 years.

LeClercq, who is honorary member of the National Cottonseed Products Association, is well known in the oil milling and oilseed products field. He went to work for the old Apache Cotton Oil Co. at Chickasha, Okla., in 1915 and remained there until he went into the Army in 1917. In 1919 he went with the old Dallas Oil and Refining Co., in Dallas, which was headed by his father, the late J. S. LeClercq, Sr. When his father died in 1932 LeClercq, Jr., was made vice-president and general manager.

When the mill was sold LeClercq was made coordinator between the oil mills in North and West Texas and the government and served in that capacity during the 1941-42 season. He has been inactive in business since that time.

toxaphene kills weevils

AND OTHER COTTON PESTS

More weevils than ever are expected this year! Wipe them out before they wipe *you* out—by dusting or spraying regularly with toxaphene! Cotton farmers last year proved that this low-cost poison is sure death to weevils and other common cotton pests—sure way to increased yield and profit. Return coupon for free, 16-page, full-color booklet which illustrates and describes harmful cotton insects in detail.

HERCULES POWDER COMPANY 943 King Street, Wilmington 99, Delaware

Send free copy of 16-page booklet, "Cotton Insects".

Name.....

Street or R.D.....

City.....State.....

NX50-10

THE CHEMICAL BASE FOR TOXAPHENE INSECTICIDES IS PRODUCED BY HERCULES FROM THE SOUTHERN PINE

—Questions and Answers—

about the three phases of the insect control program for Texas in 1950

TEXAS Extension Circular C-182A, the popular Question and Answer supplement to the 1950 Guide for Controlling Cotton Insects in Texas, was given wide distribution in the state and has helped to stimulate greater interest than ever before in holding down insect damage.

■ Insect carry-over, especially of boll weevils, was unusually heavy and in many sections of the Belt conditions have been ideal this spring for thrip build-up. In Texas, for example, most early-planted cotton has suffered considerable thrip damage. Fleahoppers have also been very abundant. in many sections.

■ Reports bear out early predictions, however, that sprays and dusts would be more widely used than in any previous year and growers who have used poisons on early cotton have been able to control thrips, fleahoppers, and over-wintered boll weevils. These growers are now standing by while beneficial insects build-up to give protection against bollworms.

■ That part of Texas Extension Circular C-182A dealing with early season control was published in our April 1, 1950 issue. Ginners and oil millers are now urged to bring to the attention of the farmer the benefits to be derived from a program of late-season control. Following is the text of the late-season control section of Circular C-182A:

2—Late Season Control

"Late season control depends upon the severity of the infestation and should be followed as needed regardless of whether or not early season control has been followed."

What are the benefits that might reasonably be expected from late season control program?

1. Increase in yields. The increases in yield will vary according to the severity of the insect infestation and the potential production of the soil.

2. Better grade.

Is the program of any advantage on individual farms or fields?

The program is effective on any size field.

Can farmers learn to identify cotton insects and to make counts?

The responsibility for insect control rests squarely on the shoulders of the grower. Farmers CAN and SHOULD learn how to identify cotton insects and to evaluate their damage. The effectiveness of application depends on how well the recommended poisons are put on at the proper time.

The County 7-Step Cotton Committee should make plans to teach all interested farmers how to identify insects and to make their own counts. Farmers should know how to apply poison properly; as well as when and when not to spend money for poison. Material showing cotton pests, with their life history, is available for free distribution.

"Late season control depends upon the severity of the infestation and should be followed as needed."

Number of applications will vary according to the insect infestation and injury.

When Should Control Start?

Start control as recommended in C-182, "Guide For Controlling Cotton Insects In Texas."

However, if infestation is sufficiently high to warrant control, one should take into consideration such factors as the moisture and growing condition of plants. In other words, there would be no point in treating if the cotton was suffering from a lack of moisture and was not growing or able to put on fruit.

How can infestation counts be made and what suggestions will help in the control of the fleahopper, boll weevil, and bollworm?

Fleahopper:

1. Make weekly examinations beginning when cotton is big enough and old enough to produce squares.

2. Examine the main-stem terminal "bud" of 100 cotton plants (about 3 or 4 inches of the top of the cotton plant), recording the number of adults and nymphs. These examinations should be made at several representative points in the field to make the 100 terminals so as to determine the degree of infestation.

Boll Weevil:

1. Make weekly examinations for boll weevils beginning after the plants are squaring freely or have produced as many as 3 squares, at least 1/3 grown, per plant. To make these records, walk diagonally across the center of the field, picking 100 squares as you walk. These squares should be about 1/3 grown or larger and an equal number should be picked from the top, middle and lower branches of the plants. In a convenient place, examine the squares for weevil punctures.

2. Two or 3 applications of poison at 5-day intervals are necessary. Poison will effectively control only the adults. Therefore, more than 1 application is needed to kill the adults as they develop from the punctured squares. With heavy infestations and good growing conditions more than 3 applications are frequently necessary.

3. If weevils are found in injurious numbers late in the season after the crop is set, 1 or more applications of insecticides should be made to protect the bolls.

Bollworm:

1. When the majority of corn silks begin to dry, start examinations for bollworm eggs on cotton and continue every 5 days until the crop has matured. In general these dates will be as follows:

South.....First week in July
Central....Second week in July
North.....Third week in July

2. Examine 100 plant terminals as indicated for fleahopper.

3. If bollworm eggs are found on the terminals examined and 4 or 5 young worms are found in the small squares or on tender leaves, the infestation is considered high enough to necessitate treatment. Bollworm eggs, when they are first deposited on the plants, are white and about the size of mustard seed and as hatching time approaches they change to a dirty white in color. These eggs will be found scattered promiscuously on the terminal portion of the plant.

4. To obtain adequate control no time should be lost in applying insecticides after eggs and the above number of young worms have been found. Continue at 5-day intervals as long as necessary.

"Materials and methods of application for late season control."

Which is more effective—dusts or sprays?

Experiments show that dusts and sprays are equally effective for bollworms and boll weevils until weevil migration. During weevil migration sprays may be used but in some cases dusts have proven more effective for boll weevil control.

What dosages should be used?

The dosage should be increased with the size of the plant and severity of the infestation. SEE GUIDE FOR SPECIFIC CONTROL RECOMMENDATIONS.

Soybean Quality in April Continued Good

Soybeans marketed in April continued to be of good quality, according to reports to USDA. Eighty-four percent graded No. 2 or better compared with 80 percent in March and 85 percent in February. Seventy-nine percent graded No. 2 or better for October through April compared with 73 percent last year.

April inspections totaled 6,298 cars compared with 6,166 cars in March and 4,908 cars the April average for the crop years 1943-47. Inspected receipts for October through April were 82,918 cars compared with 80,867 cars for the same months last season.

Inspections of soybeans in April included the equivalent of 405 cars inspected as cargo lots and truck receipts equal to about 188 cars.

FORT WORTH PRODUCTS CAN SOLVE *Problems* IN YOUR MILL

IN THE FOLLOWING DEPARTMENTS

SEED HOUSE and CLEANING ROOM

- Pneumatic Seed Cooling Systems
- Pneumatic Seed Unloaders
- Automatic Power Shovels
- Steel Sand and Boll Reels
- Cotton Seed Sample Shakers with Automatic sample reducer

LINT ROOM

- Pneumatic Lint Flue Systems
- Lint Cleaning Beaters
- Brushless Linter Attachments
- Linter Saws and Magnet Boards
- Lint Condensers

CAKE and MEAL ROOM

- Cake Cutters & Breakers
- Cake Screening Equipment

ANYWHERE IN THE MILL WITH CONVEYING & POWER TRANSMISSION EQUIPMENT

•PNEUMATIC

- Pressure Seed and Hull Blowing Equipment
- Screw and Rotary Type Pressure Feeders
- Exhaust Fans—Cyclone Separators

•MECHANICAL

Screw conveyors and accessories
Inclined drag flight conveyors
Steel Bucket elevators
Elevator Buckets
Screw Elevators
Multiple V-belt drives
Roller chain drives

For Information, Call or Write Sales Office Nearest You

MAIN SALES OFFICE: 3600 McCart St., Fort Worth, Texas

Plants located at Fort Worth and Dallas

ATLANTA, GA.
P. O. Box 1065
Phone CAlhoun 9658

HOUSTON, TEXAS
1212 Walnut St.
Phone CH-0469

LOS ANGELES
2922 E. Olympic
ANgelus 36128

MEMPHIS
P. O. Box 1499
Phone 33-2986

FORT WORTH STEEL AND MACHINERY CO.

MANUFACTURERS OF HIGH-GRADE OIL MILL EQUIPMENT

Moore Heads Tri-States Mill Superintendents

A RECORD attendance of 565 registered delegates at the June 1-2-3 convention of the Tri-States Oil Mill Superintendents' Association at Hotel Peabody in Memphis was a great tribute to the planning of President E. S. Lyle, Dyersburg, Tenn., and C. C. Castillow, Greenville, Miss., general convention chairman. It also indicates growing interest on the part of the superintendents in milling problems and modern methods of extraction.

New president of the Association is N. Hunt Moore of Delta Products Co., Wilson, Ark., who served as vice-president during the year just ended. Cecil Crawford of Planters Manufacturing Co., Clarksdale, Miss., is the new vice-president, succeeding Moore. L. E. Roberts, De Soto Oil Co., Memphis, was re-elected secretary-treasurer; and Jane Inez Gordon, Woodson-Tenent Laboratories, Memphis, was re-elected corresponding secretary.

The Exsolex (contraction of Expeller-solvent extraction) process of extraction, developed and patented by the V. D. Anderson Co., Cleveland, Ohio, and put into the first commercial application by Delta Products Co., Wilson, Ark., was discussed by Moore, the new association president, at the first day's business session. He said mills contemplating a change-over to this process must consider the many items that make up the profit and loss statement in mill operation. "With a properly designed and arranged plant," Moore said, "it would be possible to process cottonseed, soybeans, flaxseed, peanuts, copra, sunflowers and sesame with residual oils as low as 0.5 percent. With the rapidly changing vegetable oil picture in the cotton area, this is a very important factor."

In explaining the economy of the new process, Moore cited records of his company to show that mills can save up to $6.50 per ton of seed crushed by producing more oil with less labor.

"The root of most personnel problems lies in the supervisor's inability to realize that all men have the same basic rights and needs," observed Floyd Bates, Rose City Cotton Oil Mill, Little Rock, Ark. in speaking on "Personnel Problems." He emphasized that those who supervise the work of others need to recognize that certain basic qualities are common to all men, but they also need to understand that no two men are alike.

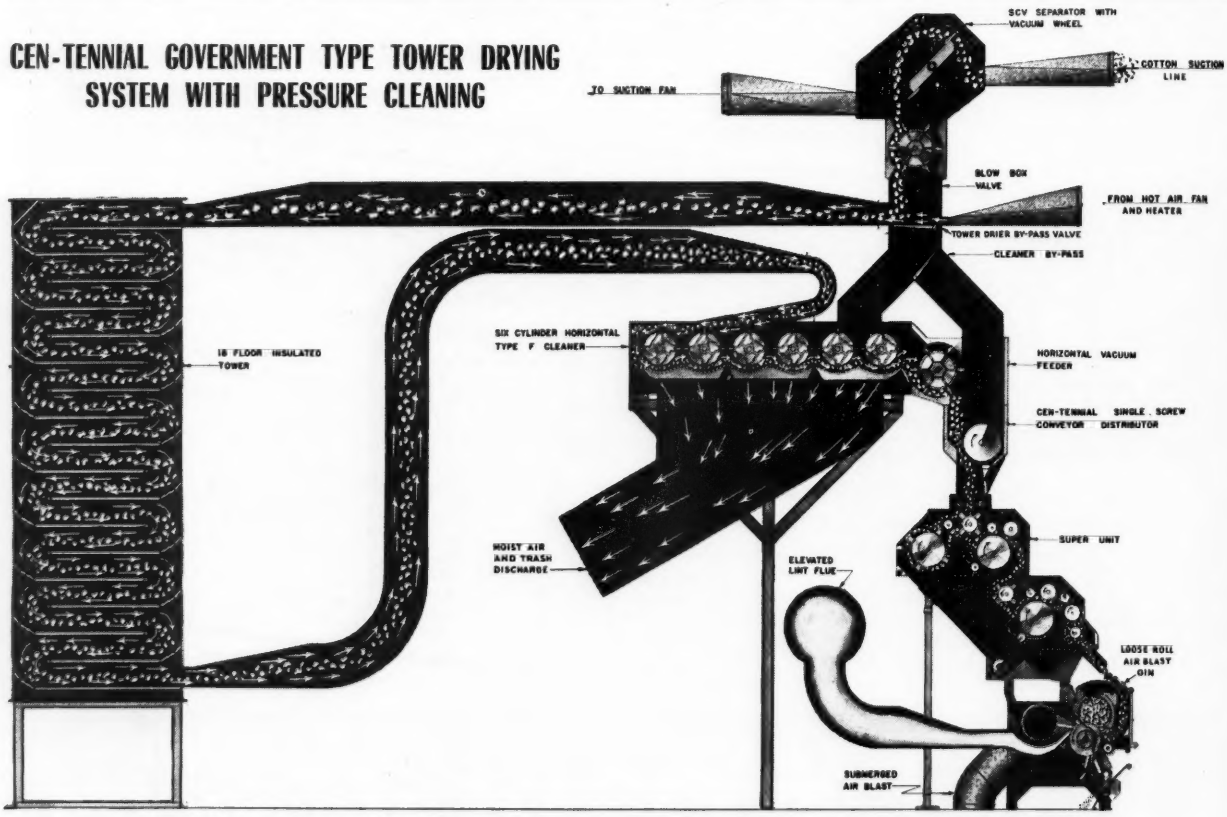
"No two persons respond to the same situation in exactly the same fashion," he declared. "Words of praise will spur one man on, while another will become 'cocky' and slack up on his work. Companies are not being efficiently operated if they fail to utilize all their employees are capable of doing. Few men are satisfied on a routine job when they know they are capable of holding more responsible jobs."

Development of a fermented cottonseed flavoring sauce for soups and vegetables is under way at the Cottonseed Products Research Laboratory at Texas A. & M. College, stated Cecil Wamble, manager, in discussing "Research in Our Industry." The new sauce is called "coy sauce," and is a mixture of cottonseed kernels and parched wheat. Wamble said it is much like soy sauce, which is a fermented product.

T. S. Pryor, assistant district engineer, Southern Cotton Oil Co., Montgomery, Ala., outlined for the superintendents "The Way to Make the Best Out of Maintenance Dollars." He said the best way to do this is to have a definite, scheduled program of preventive maintenance, and to see that it is carried out as planned.

"If you have such a program, and in addition are making the necessary minor repairs as they are required, these should eliminate many major repairs, or greatly prolong the time when they are necessary," he advised. "Nearly every ma-

CEN-TENNIAL GOVERNMENT TYPE TOWER DRYING SYSTEM WITH PRESSURE CLEANING



CEN-TENNIAL COTTON GIN CO.

DALLAS, TEXAS COLUMBUS, GA. MEMPHIS, TENN.

chine eventually reaches the age when, due to wear or obsolescence, it is more economical to replace the whole machine than to continue to repair it. Although the replacement of machines is a matter of company policy, the superintendent should have enough information available to enable him to recommend when such replacements should be made."

The use of chemical solvents to extract oil from seed will soon replace hydraulic presses throughout the whole oil extraction industry, predicted L. L. Ford, engineering consultant for Davidson-Kennedy Co., Enterprise, Ala., in addressing the group on "Peanuts in Oil Mill, Solvent Versus Hydraulic."

Because there have been "very few new developments in the seed cleaning field" in recent years, the industry received a setback when snapping and mechanical harvesting of cotton began on a large scale, Lucian Cole, Industrial Machinery Co., Fort Worth, Texas, said in speaking on "Lint Cleaning and Linter Room Operations."

It is necessary, Cole said, to know something about the market and the demand for lint. "Then," he said, "arrange your linter rooms so as to change easily to meet these demands. The best friend I have is arranging his linter room so that he can make five cuts of lint. By so doing, he will be in a position to meet almost any demand for lint by simply opening and closing a valve in the rubber line from his lint cleaning units. In this way he can blend or bale separately a first cut lint, mill run lint, as well as the last three cuts, as second cut or fiber for the chemical trade. Under these conditions, he will have three bale presses and can simply bale any one of the five cuts or any combination. Furthermore, he will have 60 linters with 12 linters for each cut. There will be five lint flue systems and five separate lint cleaners together with three bale presses. So you can see he's got everything.

"Experience has taught us," Cole told the superintendents, "that the best method of cleaning lint is with slow-speed beaters having sufficient cleaning area to allow all the foreign materials to beat through and at the same time avoid balling or twisting the lint.

"In an earnest effort to bring you a paper with some up-to-date information, I have gathered data for you from the west to the east coast and am frank to tell you the lighter the air the easier the cleaning is done. It is much easier to do a good clean separation where the air is light and there is considerable difference in the weight of air and the materials to be separated.

"It's also easier to get a better separation under your linter when the air is dry and light. We have also found it inadvisable to have the lint cleaner set directly under the large lint flue collector, because in most cases, these large collectors have a blow down into the cleaner with sufficient force to make cleaning almost impossible as the lint is more or less blown through the beater without sufficient beating, and the fine light shale and pepper rides through the cleaner with this current of air, assisted by the suction on the robber line at the discharge end of the lint cleaner.

"We have also found," Cole concluded, "that where the large collector discharged directly into the cleaner, especially in sections where the wind is high or changes from day to day, it's impossible to make a uniform lint as the collector causes a pumping effect in the cleaner that responds in perfect coordination with the wind outside."

Thomas W. Hutchinson, West Tennessee Soya Mill, Tiptonville, Tenn., reported that "new methods of processing soybeans by solvent extraction have reduced the amount of oil left in the cake from four percent to one-eighth of one percent, resulting in tremendous savings." His speech was entitled, "Methods of Processing Soybeans by Solvent Extraction."

J. L. Tennent, Jr., Refuge Cotton Oil Co., Columbus, Miss., said in his paper, "Proper Method of Cooling Seed and What It Means To Us," that there is only one method for cooling seed, and that is to pull the air through the seed from top to bottom, rather than force it through from the bottom up. This process, he said, keeps moisture from accumulating and rotting the seed.

"Comparison Between A Bomb and H Bomb" was the title of a humorous address by Harry Southall, Union Oil Co., Inc., Bunkie, La.

Frank Quinn, Minter City Oil Mill, Minter City, Miss., spoke on "How to Eliminate Waste and Increase Tonnage." O. H. Sale, Davidson-Kennedy Co., Atlanta, Ga., served as moderator for the meeting.

It was announced by C. C. Castillow that the 1951 annual convention of the Tri-States Association will be held at Atlanta, Ga.

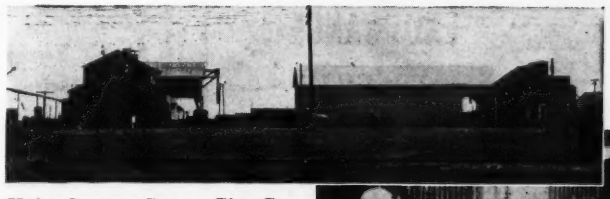
• Thirty-three percent of all U.S. farms have at least one truck or one trailer. About 53 percent have none.

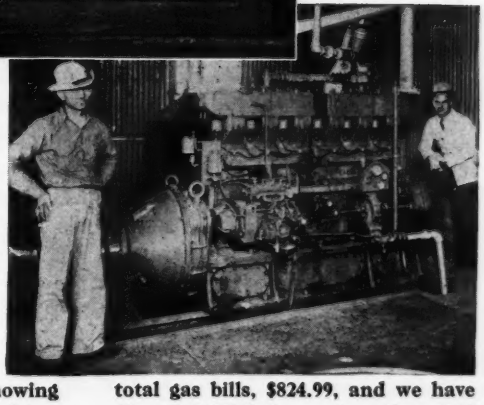
EASIER and CHEAPER

✓to install
✓to operate

WAUKESHA

...modern GIN ENGINES





Hale Center Co-op Gin Co., Hale Center, Texas, replaced steam equipment when the 1947-48 ginning season closed. Mr. Luther Goode, Manager, says, "We checked on all types of engines and decided to install one of your Model 6-LRO (*8½" bore x 8½" stroke, 2894 cu. in. displacement*) **Waukesha Engines. Installation was made completely by members of this Co-op gin and no expensive outside labor was necessary... showing how time for off-season in our work can be used. The engine was operated on natural gas at all times. In addition we heated engine room, a large shower room and operated a 1,500,000 Btu. drier all on the same meter. Our total gas bills, $824.99, and we have ginned 4,833 bales... less than $.17 per bale for gas to operate everything. Engine itself operated for less than $.20 per bale for fuel, oil and necessary other expense."**

Get Bulletins 1519 and 1434

WAUKESHA MOTOR COMPANY, WAUKESHA, WIS. • New York • Tulsa • Los Angeles

Oilseed Production —

Chile Approaches Self-Sufficiency

Chile is rapidly becoming self-sufficient in the production of oilseed for the manufacture of edible vegetable oils, USDA reports. Sunflower seed is the chief raw material used and, provided prices remain above competitive cash crops, Chile soon should be able fully to satisfy its domestic requirements.

Imports of oilseeds in the past few years have decreased greatly and the number of local processing factories has increased to at least 10. The most modern extraction equipment is reported to be used in the largest of these factories and the quality of oil produced is entirely satisfactory. However, the quantity of edible oil usually available from domestic sources and imports has not been sufficient to keep consumers regularly supplied and still leave a balance for emergencies.

In the future it is believed that both hempseed and rapeseed may largely disappear from the market. Hemp is grown principally for fiber and eventually good fiber practice may demand that hemp be sown and harvested solely to produce quality fiber. Rapeseed is not a cultivated crop in Chile but grows wild in the wheat fields. With better wheat prices and the introduction of selective weed killers, it is conceivable that rape may be eliminated entirely from wheat sowings. Then unless it is found profitable to plant rape as a cash crop, it too will have to be replaced by sunflowers.

• **Sunflower Seed Production Is Up**—The 1949-50 sunflower seed crop is estimated at about 65,900 short tons from 108,700 acres, the largest crop in Chilean history, and almost 19 percent larger than the 55,490-ton harvest of 1948-49. The steadily increasing area sown to sunflower seed for edible oil has been due to the government's policy of guaranteeing high prices for its production.

Although about 123,600 acres of sunflower seed are generally stated to be the government's goal, it is believed that a larger area would have to be sown if the country is really to become self-sufficient. The oil factories consider that Chile needs a minimum of 100,000 tons of oilseeds to meet oil requirements. This would require about 175,000 acres.

Some 22,500 tons of edible vegetable oils were produced in Chile in 1949 and by far the greater part was from sunflower seed.

• **Hempseed Crop Is Small**—Hempseed production amounted to 3,300 tons from 7,800 acres in 1949-50, or 30 percent less than the 4,760 tons from 11,430 acres the previous year. This was the smallest crop since before the war, a fact attributed by oil factories to the lack of interest in increasing hemp fiber production.

• **Other Edible Oilseeds**—There are no official figures for rapeseed. Production is estimated at 4,000-4,400 tons. Rapeseed oil is successfully blended with sunflower seed oil for table use. The seed sells for the same price as hempseed.

A small quantity of rice oil—about 33 tons per month—is processed from rice bran. About 20 percent of sunflower seed oil is mixed with it to make it palatable.

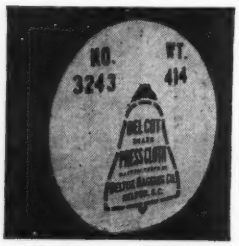
Chile produced about 590 tons of olive oil in 1949 from olives produced from roughly 255,000 trees. It is believed that there are about 950,000 olive trees in Chile but only about 25 percent are now in production. No olive oil was exported in 1949 but producers have been authorized to export 165 tons during 1950. A small quantity was imported—mostly from Italy.

• **Flaxseed Are Only Source of Inedible Oil**—The only seed reportedly grown for the production of inedible oil is flaxseed. The 1949-50 crop amounted to 147,400 bushels from 12,900 acres, a decrease of 39 percent from the 1948-49 crop of 241,200 bushels from 18,700 acres.

Exportation of both flaxseed and linseed oil is currently prohibited. Imports of linseed oil and the so-called stand oil having a linseed base amounted to 75 tons in 1949. The greater portion of these imports originated in the U.S.

At present Chile produces its entire requirements of linseed oil. Smaller acreages, however, are constantly diminishing supplies of flaxseed. Should insufficient seed be harvested at any time, imports probably would be in the form of seed, rather than oil, since local factories are equipped to produce all the oil that is needed. Oil production in 1949 is estimated to have been 2,200 tons whereas this year's output probably will not surpass 1,300 tons.

BELCOT BRAND PRESS CLOTH



for

ENDURANCE

STRENGTH

and

BETTER EXTRACTION

Dependable eveness and regularity make Belcot Press Cloth your best buy. This expertly woven cloth is made by a highly specialized process in our plant — from raw wools to finished cloth. Belcot's better extractive qualities give you outstanding savings year after year. Get Belcot.

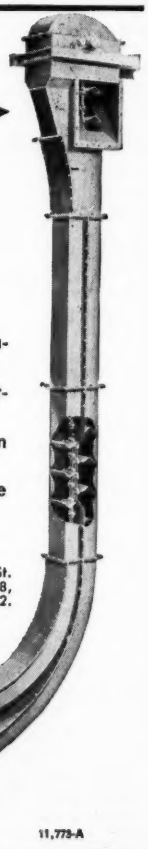
Belton Nylon Press Cloth Available

"Built to Stand the Pressure"

BELTON BAGGING COMPANY

Belton, South Carolina

LINK-BELT BULK-FLO →



Can Help You Meet Today's Special Processing Requirements

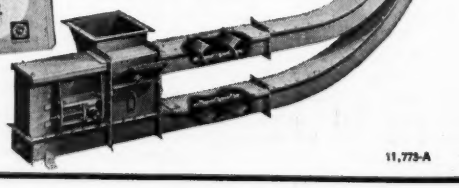
Some advantages of the Bulk-Flo:

- Combination elevator-conveyor-feeder.
- Compact — occupies minimum space.
- Self-loading to capacity — requires no separate feeder.
- Operates slowly — moving material in compartments — no churning.
- Dust-tight operation and minimum degradation of material.
- Permits use of multiple feed and discharge points along horizontal runs.

LINK-BELT COMPANY

Atlanta, Dallas 1, New Orleans 12, St. Louis 1, Charlotte 2, N. C., Baltimore 18, Birmingham 3, Houston 1, Jacksonville 2. Distributors Throughout the South.

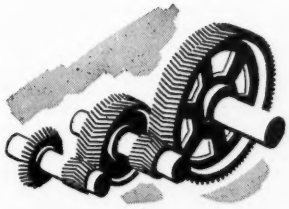
Book 2175 tells the complete story. Send for your copy today.



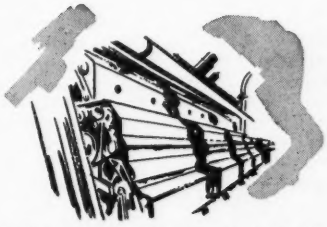
11,773-A

Quick Reference Guide

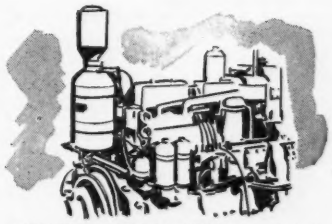
to lower operating and maintenance costs



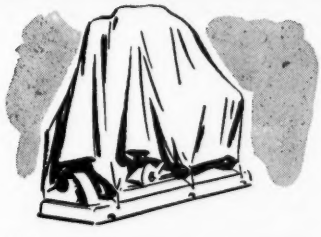
GULF E.P. LUBRICANTS—for better protection of reduction gear drives.



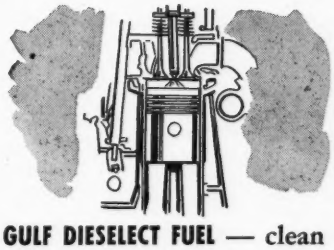
GULF H.M. GREASE —for ball and roller bearings in cotton gins.



GULFLUBE MOTOR OIL H.D.—high quality heavy-duty detergent oil for lubrication of Diesel engines.

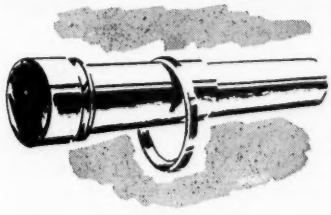


GULF QUALITY RUST PREVENTIVES — full protection against rust for idle equipment.

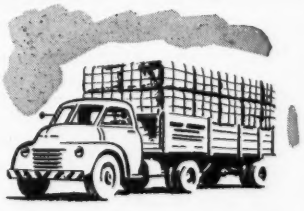


GULF DIESELECT FUEL — clean burning Diesel fuel — contains no cracked materials.

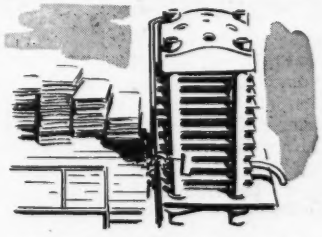
GULF PRECISION GREASE — for outstanding lubrication of grease lubricated electric motor bearings.



GULF HARMONY OIL — provides lasting protection for ring oiled electric motors.



GULFPRIDE-MOTOR—the world's finest motor oil.



GULF QUALITY HYDRAULIC OILS—the proper type and grade for every hydraulic press.

It will pay you to investigate their application in your mill... *Call in a Gulf Lubrication Engineer today!*

GULF OIL CORPORATION • GULF REFINING COMPANY
GULF BUILDING, PITTSBURGH, PA.

Sales Offices-Warehouses located in principal cities and towns throughout Gulf's marketing territory

GULF INDUSTRIAL LUBRICATION

helps make machines produce more at lower cost

Rough TREATMENT?

You don't have to worry
if they're bound with

U·S·S ARROW COTTON TIES!

Your bales will be kept neat, firm and compact from press to destination if you bind them with U·S·S Arrow Cotton Ties. These tough ties, made by the South's largest manufacturer of steel and the world's largest producer of cotton ties, are designed to withstand internal strain and external abrasions. They do not cut through at the buckles. Careful supervision, from ore to finished product, assures you of quality ties.

More U·S·S Arrow Cotton Ties are used by the majority of ginners in the South and Southwest than any other brand. They have proved their dependability.

Order your U·S·S Arrow Cotton Ties from conveniently located warehouses in the Cotton Belt. They are available for immediate delivery.

Look for the "T" on the buckle of genuine U·S·S ARROW COTTON TIES

The standard bundle of U·S·S Arrow Cotton Ties contains 30 ties, 11½ feet in length, and 30 buckles. It weighs approximately 45 pounds. Ties are 15/16" wide and approximately No. 19 gauge steel.
Special Arrow Ties, 12 feet in length, weigh about 60 pounds per bundle of 30 ties and 30 buckles. Ties are 15/16" wide and approximately No. 18 gauge steel.

High Density Compress Bands are also available 30 ties to the bundle in specified lengths.

TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM
UNITED STATES STEEL EXPORT CO., NEW YORK

USS ARROW COTTON TIES
UNITED STATES STEEL

Alabama-Florida-Georgia Crushers Met June 5-6

Georgia's Congressman Pace was principal speaker. H. G. Ray is new Georgia association president; F. W. Hurston to head Alabama-Florida association.

Congressman Stephen Pace (Ga.) told members of the Alabama-Florida and Georgia crushers associations at their joint convention, held at Wilmington Island, Savannah, June 5 and 6, that the low price of cottonseed at the beginning of last season made Congress decide to institute the price support program. He admitted, however, that "because of the emergency existing" crushers, ginners and others affected were not given the consideration due them last year. Thus, he said, part of the criticism leveled at the 1949 program was justified.

Congressman Pace said he hoped cotton industry leaders would work with the Government in setting up a workable program for 1950 and reviewed the broad outlines of the program as announced by PMA Administrator Ralph S. Trigg early in April of this year.

The Georgia Congressman told the crushers he anticipates cotton and cottonseed supports for several years to come and asked the delegates why they did not demand acreage controls for soybeans as well. After Pace addressed the crushers, W. A. Hartman, assistant director of the Atlanta PMA Commodity Office, suggested that the Alabama-Florida and the Georgia associations appoint committees to work with his office in carrying out the 1950 cottonseed support program.

Present to address the crushers was S. M. Harmon, Memphis, secretary-treasurer of the National Cottonseed Products Association. He discussed with them the Association's trading rules and stressed their importance in the industry's successful operation.

E. R. Morrissette, Ozark, Ala., president of the Alabama-Florida association, was unable to attend the convention because of illness. J. H. Bryson, Dothan, presided in his absence at the first day's session.

W. D. Lowe, Jackson, Miss., newly elected president of the National Cottonseed Products Association, told the crushers they face a crucial period. In meeting their problems, he said, crushers must be above-board in all their actions and must stand together as an industry for mutual protection.

The opportunities our way of life offers were discussed by Warren Whitney of Birmingham, Ala. These opportunities, he said, are freedom of worship, freedom of speech, freedom to work in whatever job or vocation we choose, and opportunity to carry on in a way of life that we deem best for ourselves.

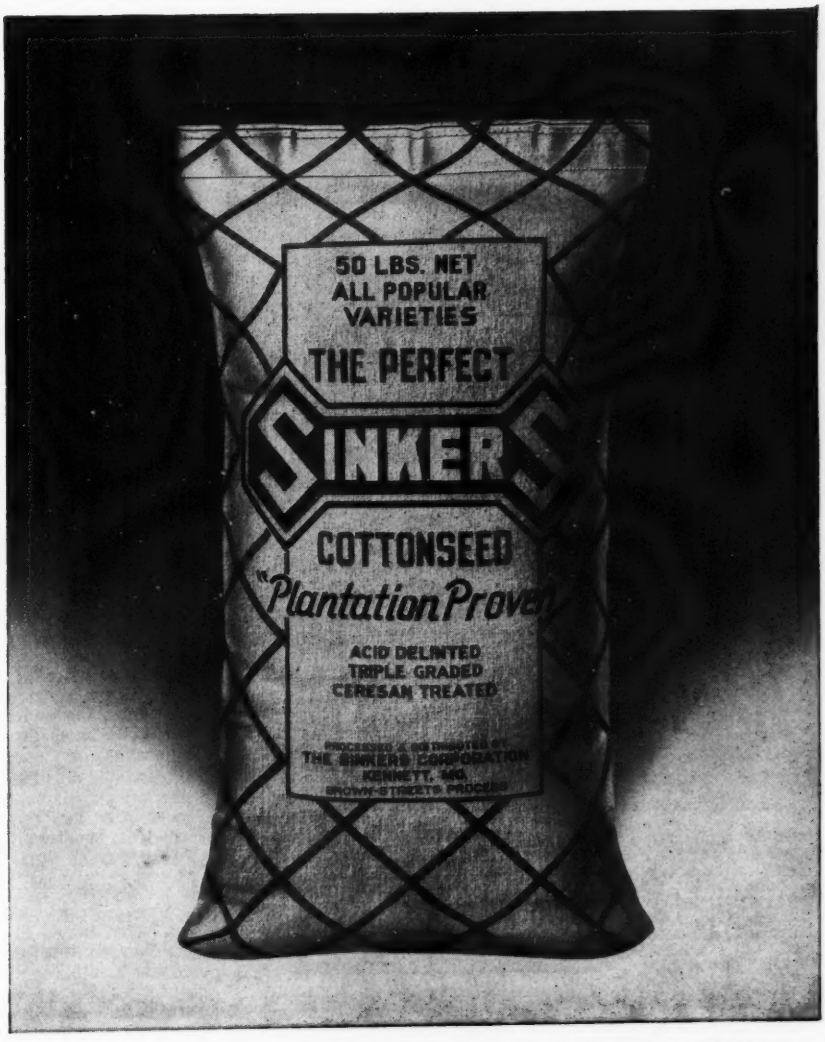
Whitney pointed out that there is a definite need for us to protect our American way, strengthen it, then give our system to those countries that need help. He further stated that there are those who would change us today and who want to buy security without work. This is not, he asserted, our way of life and our American system was not founded on such a system. He ended his talk by saying that we should have the courage to change those things which must be changed but at the same time have strength enough to know which things should be changed and which should not.

U. F. Stewart, Savannah, was chairman of the entertainment committee and he and his group were warmly congratulated by the crushers and members of their families for making this one of the most enjoyable conventions the two associations have ever held.

H. G. Ray, Jr., Taylor Oil Mills, Moultrie, Ga., was elected president of the Georgia association, succeeding J. T. Preston, Monroe. Ray moves up from vice-president. Sam McGowan, The Southern Cotton Oil Co., Cartersville, was elected vice-president, and J. E. Moses, Atlanta, is secretary-treasurer.

F. W. Hurston, The Southern Cotton Oil Co., Cullman, Ala., is the new president of the Alabama-Florida association, succeeding E. R. Morrissette, Ozark, Ala. T. R. Cain, Montgomery, Ala., is executive secretary.

• Airplane spraying and dusting and the use of heavy tractor equipment are spectacular ways to fight boll weevils, but a majority of the 116,000 cotton allotments in Georgia this year are for small acreages and are on small farms where dusting and spraying equipment is not available. Custom work is one method of overcoming this handicap, the Georgia Extension Service recommends.



SOLD EVERYWHERE BY QUALITY SEEDSMEN

THE SINKERS CORPORATION
KENNETT, MISSOURI

Who Benefits From

Farm Technology?

Technological progress on farms over the last half century has left its mark upon every phase of public life as well as revolutionized American agriculture, USDA's Bureau of Agricultural Economics declares in a report in The Agricultural Situation.

• **Science Increases Productivity**—Most dramatic and widely recognized result of the application of science to agriculture, the report points out, is the rapid increase in physical productivity of agriculture which has enabled the U.S. farm plant to produce twice as much as at the turn of the century.

Furthermore, a much smaller labor force is now needed on the farm. For example, in 1945 one farm worker produced enough for himself and 14 other persons, whereas 50 years ago one worker produced enough for himself and only seven others. With fewer farm workers producing larger quantities of farm products, many farm people have joined the labor force of industry.

• **Farm Living Is More Pleasant**—Technological change also has done much to make farm life more attractive. Work drudgery has been lessened on the farm and in the home, leaving farm people freer to enjoy recreation and to participate in community and other activities. Higher incomes have made it possible for many farmers to buy automobiles, household conveniences and other goods and services that enable them to belong to the same community groups as nonfarm people.

• **Blessings Are Not Unmixed**—Against these achievements must be weighed some of the problems created by technological improvement on the farm. Although gains have been widespread, they have largely bypassed many farms and farmers, particularly small-scale units in the eastern part of the Cotton Belt, mountainous areas or cut-over lands in the lake states.

Except for war emergencies, output of many products has increased faster than demand, so that surpluses have become a major economic problem. Also, many benefits of improved farm production methods are passed on to other groups rather than retained by the farmer.

Technological improvements sometimes reduce costs of production without causing a larger output, thus enabling farmers to hold all of the gains resulting from lower costs. When an improvement results in increased production, as is usually the case, the outcome is less certain. If demand for the product expands as fast as an improvement increases total production, farmers are likely to hold much of the gain and consumers also benefit because increased production prevents a rise in prices.

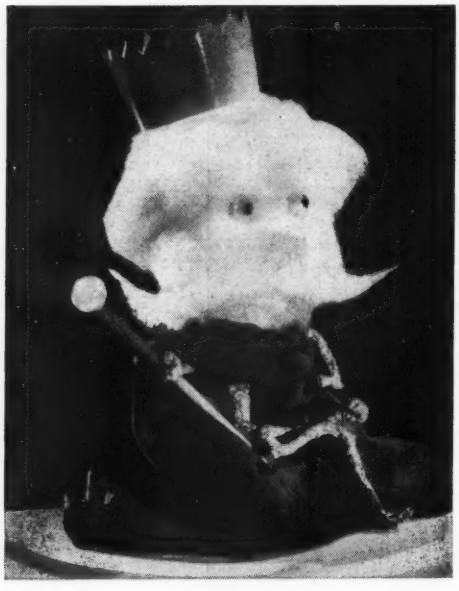
• **Production Increases Can Cut Profits**—For many products, however, demand expands slowly. An increase in supply resulting from rapid and widespread adoption of an improvement may lower prices so much that the gross return of farmers as a group declines more than their production costs. In this case, most of the benefits of an improvement are shifted from farmers to other groups. However, the general economy still may benefit because farm products are available at lower prices.

Farmers who have lowered their total production costs at the same time that production has been increased are in an excellent position to retain much of the benefits resulting from their improvements.

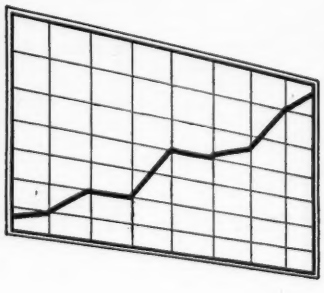
• **Fewer People—More Money Per Person**—One result of increased production per person has been a gradual decline in the number of people on farms, despite an increase in total population, which means that the agricultural income is divided among fewer farm people. Release of workers from agriculture has also furnished the labor force for the development of urban industry, which helps provide the basis for the high U.S. level of living.

If a large amount of hired labor is displaced by technological improvements, it makes a big difference in the national economy whether it takes place at a time when other employment is available or whether it occurs during a period of widespread unemployment, BAE points out. If the displaced workers must be supported by public aid, the net gain from the improvement may be partly offset by the cost of work relief.

• **Problems Do Not Mean Stop Improvements** — Despite the serious problems which have been created by agricultural technology, BAE declares, they can be solved and further developments must continue.



KING COTTON'S GROWING MARGARINE MARKET IS YOURS!



Cotton growers cheer the good news about the increasing market for margarine—a large user of cottonseed oil! Let the facts speak for themselves: Surveys showed that in 1940 only 20% of the American people used margarine, while in 1948 over 80% regularly bought this nourishing product for their tables!

And leading the field is Nucoa—America's largest-selling margarine. Golden cottonseed oil gives Nucoa its fine texture and smooth richness. And every pound contains at least 15,000 U.S.P. units of healthful vitamin A. If you have not tried this quality product, put Nucoa on your shopping list right away. You will enjoy its flavor—you will value its rich food energy.

NUCOA

America's Largest-Selling Margarine

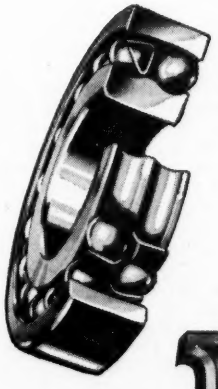
The Best Foods, Inc.

1 East 43rd Street, New York 17, N. Y.

CEN-TENNIAL CLEANS COTTON CLEANER

...Bearings engineered by SKF

Cen-Tennial Overhead Gravity Cotton Cleaners are specially designed to condition cotton before it reaches the hull extractor feeders. Improved design of the cylinders prevents roping or machining the cotton. All cylinders are equipped with SKF Self-Aligning Ball Bearings. Pioneered by SKF, these Self-Aligning Ball Bearings are used by scores of manufacturers of cotton mill equipment. Their uniform dependability is the result of ceaseless care in manufacturing, continuing research, and rigid inspection. Let SKF work with you in designing efficient low-cost operation equipment where friction is kept to the minimum. **SKF** INDUSTRIES, INC., PHILADELPHIA 32, PENNSYLVANIA—*the Pioneers of the Deep Groove Ball Bearing, Spherical Roller Bearing, Self-Aligning Ball Bearing.* 7124



SKF
BALL AND ROLLER BEARINGS

8 REASONS WHY SKF IS PREFERRED BY ALL INDUSTRY

Integrity — Craftsmanship — Metallurgy — Tolerance Control
Surface Finish — Product Uniformity — Engineering Service — Field Service

G. N. Irish to Head Oklahoma Crushers

• "Pay-off" in association's public relations program in cooperation with other cotton organizations is shown at Muskogee convention June 5-6.

Public relations pays and the forty-first annual convention of the Oklahoma Cottonseed Crushers' Association June 5-6 at Muskogee was the "pay-off" for a year of many varied public relations activities, resulting from close and effective cooperation with other organizations working in behalf of cotton.

The tie-clasp worn by Secretary-Treasurer Horace Hayden was the symbol of honorary membership in Oklahoma 4-H Clubs, presented to him for "meritorious service" the previous week.

Cotton acreage allotment figures distributed at the convention were evidence of a long and successful fight to secure for Oklahoma a fair share of U.S. cotton acreage and to get that acreage equitably distributed among farmers.

Convention speeches by representatives of many different organizations all had a theme of high praise for the cooperative spirit and good work of the association.

This public relations keynote was dominant in the convention from the opening remarks by President A. L. Hazelton and report by Secretary-Treasurer Hayden at the first session, Monday, June 6, to the discussion of Oklahoma Cotton Research Foundation activities by R. M. Lucas of Chickasha, who has served as president of the foundation, at the final session of the convention.

Speaking on "Putting Research to Work for You," Garlon A. Harper, Dallas, assistant in nutrition for the Educational Service, National Cottonseed Products Association, praised Oklahoma mills for their 100 percent record of distributing "Feeding Practices" bulletins in their territories. He pointed out the need for processing and feeding research to expand use of cottonseed meal for swine and poultry, as well as other livestock, and told of outlined national association activities in this field.

T. H. Gregory, Memphis, executive vice-president of the National Cottonseed Products Association, emphasized the dangers in present governmental trends and the need for selecting men in government as carefully as a member of the board of directors of a business organization would be chosen.

Dr. L. E. Hawkins, vice-director, Oklahoma Experiment Station, Stillwater, expressed appreciation for aid which crushers and other segments of the cotton industry are giving research, as he reviewed programs on the breeding and selection of cotton, insect control, economics, soil management and mechanization.

Oklahoma Extension Director Shawnee Brown, Stillwater, told of the activities of his organization and joined in the tributes to the oil mill group for their cooperation.

The crushers selected as their president for 1950-51 their host at Muskogee, G. N. Irish, who has been vice-president for the past year. Amos L. Kobs of Elk City was elected vice-president and Hayden was renamed secretary-treasurer.

Elected directors were: Claude Britain, Chickasha; S. C. Boswell, Ada; H. P. Cook, Guthrie; A. M. Frierson, Bristow; A. L. Hazelton, Oklahoma City; George T. Jepson, Prague; G. E. Knipe, Oklahoma City; J. C. Pearson, Oklahoma City; and Irish and Kobs.

Mr. and Mrs. Irish were hosts Monday evening at a delightful Friendship Hour given for convention guests by the Muskogee Cotton Oil Company.

An interesting and enjoyable feature of the annual dinner dance was a demonstration of cotton home furnishings and clothing by 4-H Club girls. Evelyn Heien and Wanda Hohmann presented the home furnishings demonstration, and Maxine Tinney and Beulah Luker the clothing demonstration. Hazelton presented checks to the girls as state winners in the 4-H Club contest sponsored by crushers, ginners and merchants.

A number of home demonstration leaders in the girls' contest and Extension Service leaders in boys' cotton production contests, farm demonstrations and other activities, were guests at the convention.

On Tuesday's program, Ira Holler, state 4-H Club leader, outlined the work of these boys and thanked the crushers for their active interest in the 4-H program.

Lucas told how the industry, including farmers and other branches, has raised more than $50,000 for the Oklahoma Cotton Research Foundation, and described progress that the foundation has made. This foundation, initiated by the crushers two years ago, has been the pattern for similar programs by other Oklahoma farm groups.

Hal Dilworth of the National Cotton Council reviewed briefly some major activities of the Council, thanking Oklahoma for its active cooperation.

Resolutions were adopted urging the development of a sound program of governmental supports for cottonseed products and equitable cotton acreage allotments.

PMA to Sell Crude and Refined Cottonseed Oil

Crude and refined cottonseed oil acquired in the Southwest area under government price support will now be offered for domestic and export sale by the Dallas commodity office, Latham White, area director of the Production and Marketing Administration, has announced. Previously, cottonseed oil has been listed monthly on the national announcement of CCC-owned products for domestic and export sale.

Bids to purchase cottonseed oil will be accepted every Monday from now until further notice. Offers must reach the Dallas PMA Commodity Office not later than 10:00 a.m., CST. Bids should be submitted to White's office, Room 218, 1114 Commerce Building, Dallas 2, Texas, Telephone Riverside 6951, Extension 459, in accordance with the published sales announcement issued by that office.

Crude cottonseed oil now for sale in the Southwest is located at various points in Texas, New Mexico, and Oklahoma. Also, refined cottonseed oil, basis bleachable prime summer yellow and off summer yellow is for sale and located at Abilene, El Paso and Houston, Texas; Memphis, Tenn.; and New Orleans, La.

Commodity Credit Corporation reserves the right to accept or reject any or all offers, and will, in making awards, give primary consideration to the highest bidder, the announcement said. Consideration also will be given to the time bids are received in making awards between equal bidders. All offers are subject to the terms and conditions as prescribed by the area commodity office.

• One of the greatest needs in Georgia's agriculture today is higher yields per acre, the state Extension Service says.

EVERYTHING
IN COTTON GIN
AND OIL MILL
SUPPLIES

★ Leather and Rubber Belts
★ Browning V-Belt Drives
★ Belt Lacing—all kinds
★ SKF Ball Bearings
★ Tnemec Coatings

WELL MACHINERY & SUPPLY CO., Inc.
1629 MAIN STREET FORT WORTH

USDA-BAE Reports on

Oilseed Outlook In Argentina

As an incentive to increased production of Argentina's major oilseed crops, flaxseed and sunflower seed, in the 1950-51 season, the Argentine government has raised the price to producers.

• **Flaxseed**—The Argentine government is asking growers to plant 4.9 million acres to flaxseed for the 1950-51 crop. The trade estimate of last year's plantings is 2.7 million acres, revised downward from the previous estimate of three million acres on the basis of post-harvest reports. The acreage increase sought by the government thus amounts to approximately 80 percent. With average yields, thus would mean a crop of about 43 million bushels—greater than any crop since 1943-44 and equal to the U.S. crop of 1949.

Growers' intentions are still indefinite but many observers believe that the requested goal will not be reached because of shortages of labor and machinery. A substantial increase, however, is possible due to the 21 percent increase in price.

• **Sunflower Seed** — So far there has been no acreage goal set for sunflower seed, possibly because 1950-51 plantings will not begin before October or November.

The 1949-50 sunflower seed crop, now being harvested, is expected to total between 800,000 and 900,000 short tons. Conditions of the crop are only fair. Early plantings suffered severely from drought; late plantings in January were damaged also by dry weather although less severely. The crop nevertheless showed a surprising resistance to drought compared to adjacent corn fields which were total failures. Abandonment appears to be only a little more than the usual average. Yields, however, are low owing to reduced plant vigor and poor filling of heads.

Although the new crop is expected to be much smaller than the 1.2 million tons harvested in 1949, there probably will be an exportable surplus of about 45,000 tons of sunflower seed oil. Exports of oil during the calendar year 1949 were 12,840 tons.

The 100,000 (110,000)-ton surplus of 1948-49 oil is largely sold and is expected to move out within the next few months. Shipments in January and February were small, being only 8,145 short tons, but more rapid movement is expected soon to clear storage space for the new crushing season.

With only 45,000 short tons potentially exportable from the new crop, Argentina will not be under any pressure this year to sell rapidly and the market is expected to be slow during at least the next six months.

• **Peanuts**—Low yields rather similar to those a year ago are expected in the peanut harvest now in progress. Planting was encouraged by favorable weather, reaching about 445,000 acres, but serious damage from drought in January and February ended hopes for a good crop. The trade now expects production near 110,000 tons, moderately above last year, but well below the early expectation for 154,000 tons.

Prices to producers for this year's crop have not yet been announced. Last season the IAPI paid 60 pesos per 100 kilos of unshelled nuts ($162.10).

• **Cottonseed** — Both cotton area and yields appear somewhat greater this year than last. Total production of cottonseed is being forecast near 220,000 tons, compared with 200,000 last year. Allowing 20,000 tons for seed, the quantity available for crushing this season may be 200,000 tons.

Production of cottonseed oil from this seed is forecast by the trade at 20,000 tons. Much of this will be available for export as local consumption is largely sunflower seed oil, or sunflower seed-peanut blends.

• **Rapeseed** — The principal source of rapeseed for crushing is the cleaning of flaxseed and cereals. Commercial plantings last season were negligible. Opinions on the quantity that may be available differ widely, ranging between 3,000 and 10,000 tons. In any case, the production of oil will be very small, probably only 1,000 to 2,000 tons. Domestic use is negligible and practically all will be available for export.

QUOTES on Cotton

Prepared by the Educational Service, National Cottonseed Products Association, Dallas

NO OTHER MEANS SO MUCH—"No other crop in America means so much to so many. For half of the total farm population call the cotton country their home."—*J. M. Eleazer, South Carolina Extension Service.*

•

HOW MUCH INCOME? — "How much can you increase your cotton yield per acre? Your answer probably will be the biggest single factor in determining your 1950 income. Unless acre yields are increased, some states will have a disastrous drop in cash income."—*Walter B. Moore, in "Southern Agriculturist."*

•

CAN LOSE $35 A BALE — "Many farmers spend three-fourths of the year making a cotton crop, then in a few days lose $7 to $35 per bale by improper harvesting, ginning and marketing."—*Georgia Extension Service.*

•

EASY ON SOIL—"Cotton actually removes less plant nutrients from the *cil.*
soil than any other of the common cash crops."—*Claude L. Welch and Leonard Lett, National Cotton Coun-*

•

OFFSET ACREAGE REDUCTION—"It is possible for cotton farmers to increase cotton income by 35 to 50 percent with a minimum increase in cost. This would more than offset any lost income due to acreage reduction."—*Director I. O. Schaub, North Carolina Extension Service.*

•

RESEARCH IMPORTANT—"Research is important to the future of cotton. Cotton has been too complacent in the past."—*L E. Parsons, Texas Technological College.*

•

USE EVERY DAY—"You use cottonseed every day. You may never see these tiny seed. But many of the foods you eat, the clothes you wear, the furnishings of homes, schools and offices come from cottonseed."—*National Cottonseed Products Association.*

Covered with Carolina's Standard 2-lb. Jute Bagging, cut of bales, above, is actual photograph of same before cutting sample holes.

Cotton so covered is subjected to less weather damage than either closely woven cotton, Burlap, or Sugar Bag Cloth due to open weave admitting sunlight and air, and looks better than either after sample holes are cut, and is unquestionably better for the purpose.

CAROLINA BAGGING COMPANY

Jno. S. King & Co. Sales Agents Memphis, Tennessee

Manufacturers and Importers
HENDERSON, NORTH CAROLINA

C. P. (Charlie) Guthrie Sales Agent Dallas, Texas

Arkansas-Missouri Ginners to Have Permanent Office

Hot Springs convention June 5-6 was Association's biggest yet. All officers re-elected.

The thirty-third annual convention of the Arkansas-Missouri Ginners Association at Hot Springs June 5-6 was the largest and one of the most constructive in the history of the Association. Officials said 331 ginners, crushers and members of allied industries were registered.

In his annual address President Sidney C. Mack of Newport, Ark., recommended that (1) the Association establish a permanent office in a city convenient to a majority of the members and directors; that (2) an executive committee of five members from the board of directors be created, including the president and vice-president, to expedite the handling of non-controversial matters; and that (3) the executive committee employ a full-time executive secretary or executive vice-president to coordinate the activities of the Association and carry out its plans and programs.

All three recommendations were approved and J. Warren Karsten, Jr., Kennett, Mo., was re-elected executive vice-president and secretary-treasurer. A permanent office will be established with full-time stenographic help and with necessary equipment to make possible the mailing out of special bulletins on short notice. This is an important forward step by the Association that will prove of great benefit to the members.

A farm commodity revolving fund to stimulate exports of surplus U.S. agricultural commodities during the period immediately following the Marshall Plan was advocated by Read Dunn, Jr., foreign trade director of the National Cotton Council.

Recommending that the fund be administered by the Export-Import Bank, Dunn said that loans under the fund should be made as short term credits extended on a banking basis. He emphasized that money advanced should not be grants and that loans should be extended only to countries where a reasonable ability to repay is evidenced.

"A major reason for urging that the Export-Import Bank be made the administering agency is the bank's enviable record of handling the first revolving fund for cotton established after the war," he declared. "In all the cotton loans the bank has not lost a nickel. Losses in the future are not contemplated."

To inject a degree of promotion into the program, Dunn recommended that the Secretary of Agriculture should be made a member of the bank's board of directors and be given authority to initiate loans for the approval of the board.

"Cotton credits extended by the bank in the past have had the effect of stimulating recipients to greater efforts to increase dollar earnings to get the exchange to pay off the credits," he said. "This was demonstrated not only in the case of cotton credits to Italy, but even to Poland, Czechoslovakia, and Spain."

"The real problem on the revolving credit," said Dunn, "is how to make the revolving fund revolve. This can be done only by an increase in purchases of foreign goods and services on the part of the United States.

"At the present United States exports exceed imports by almost $2 billion. The difference is being made up largely by federal grants—money out of the taxpayers' pockets.

"There are, however, indications that foreign purchasing power can be increased and exports stimulated naturally, without continued subsidy, after the Marshall Plan ends in 1952."

"At the present time, though we are exporting this season more than 5¼ million bales of cotton, more than in any year since 1938, about three-fourths of these exports are financed out of the public treasury. Certainly this system of public grants cannot continue indefinitely—not with deficit financing running at the present rate. These exports must be financed naturally by our purchases of foreign goods," Dunn declared.

"There is no question of the need of the foreign countries. The consumption of cotton on a per capita basis over the world at the present time is far below what it was before the war—in fact it is back to the 1904-13 level. It would take another five million bales of cotton to give the people of the world the same supply of clothing and industrial fibers they had before the war.

"It does not appear that the other cotton producing countries of the world will be able in the foreseeable future to meet this demand. Outside of the United States cotton production is still three to four million bales below prewar."

Present to address the ginners was W. O. Fortenberry, Lubbock, Texas, president of the National Cotton Ginners' Association, the Texas Cotton Ginners' Association, and the South Plains (Texas) association. Fortenberry said we should resent and resist the attempt being made in some quarters to array the farmer against the ginner, that ginner and farmer should be on the same side of the table because of their mutual interests, and that a major portion of the money and time spent by the national ginners organization is for the benefit of the farmer.

In a straight-from-the-shoulder talk the forceful industry leader reminded the ginners that they are a powerful influence in state and national life and urged them to utilize that influence for the public good. Ginners, he said, are not only in the ginning business but are farmers, merchants, and bankers as well.

He asserted that the ginning industry is entering a new era when practically all cotton will be machine harvested. This, he said, will multiply the ginner's problems, and will call for greater investment in plant and equipment, higher operating expenses, and the need for more highly skilled gin operators. The ginner must keep pace with the times, Fortenberry said, but he cannot assume these additional expenses with the currently low rates for ginning.

He said the ginners should give the men in Washington a pat on the back when they do something right in their dealings with ginners and farmers, but should be constructively critical when these men are wrong.

On the first day there was a round-table discussion of ginning problems in which the following participated: Charles M. Merkel and Francis L. Gerdes, of the U.S. Cotton Ginning Laboratory at Stoneville, Miss.; Harry E. Beasley, Arkansas Extension ginning specialist; and Alfred M. Pendleton, U.S. Extension ginning specialist.

Other speakers included the Hon. Paul C. Jones, member of Congress from the 10th Missouri District; Willis H. Willey, Jr., president of the Southern Cotton Shippers Association; and Jimmie Ar-

You Get Every Part, from Flighting to Drive, from One Responsible Manufacturer

Screw Conveyor has many advantages for handling a wide variety of bulk materials. It is compact, simple, efficient, easy to install, and operating costs are low. Stock service on popular sizes. Contact our nearest office for an unbiased recommendation.

LINK-BELT COMPANY

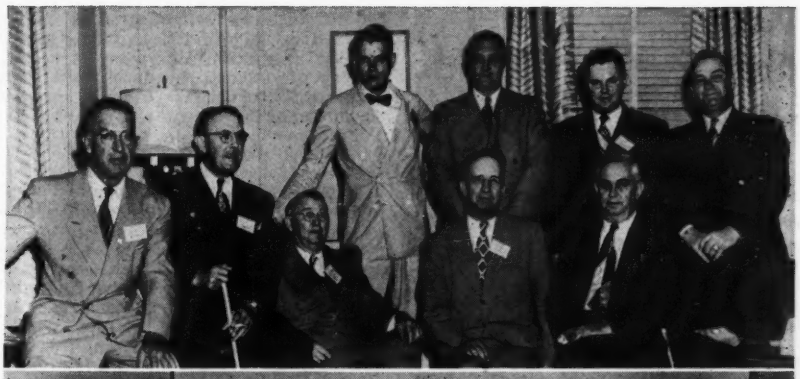
Atlanta, Dallas 1, New Orleans 12, St. Louis 1, Charlotte 2, N. C., Baltimore 18, Birmingham 3, Houston 1, Jacksonville 2. Distributors Throughout the South

11,243-A

rington, humorist, who spoke at the annual banquet.

Sidney C. Mack was re-elected president and S. Crews Reynolds, Caruthersville, Mo., was re-elected vice-president of the Association at the final business session.

Pictured at Hot Springs



■ TOP PANEL: — Seated, l. to r.: Geo. Hemphill, Kennett, Mo., a past president of the Arkansas-Missouri association and now a director; Claude Gregory, Jonesboro, Ark., also a director; Sidney C. Mack, Newport, Ark., president of the Association; S. Crews Reynolds, Caruthersville, Mo., vice-president; Lanie G. Black, Corning, Ark., a director. Standing, l. to r.: Latane Temple, Little Rock, Ark., a director representing the oil mills; J. R. Bush, Helena, Ark., a director; Fred Carter, Lake City, Ark., a director; J. P. Ross, Essex, Mo., a director.

■ SECOND PANEL—Reading l. to r.: J. J. Fletcher, England, Ark.; W. H. Bransford, Lonoke, Ark; Joe Kohn, Hayti, Mo., a past president of the Association; J. E. Allmon, Dumas, Ark.; W. H. Reaves, Batesville, Ark. All are ginners.

■ THIRD PANEL—W. O. Fortenberry, Lubbock, Texas, right, and his son, Joe, who is a student at Texas Technological College at Lubbock. Fortenberry, president of the National and Texas ginners associations, was a speaker at the Hot Springs convention.

■ BOTTOM PANEL—A few of the ladies who attended the convention. Seated, l. to r.: Mrs. C. E. Larrison, whose husband operates the Wilmot Gin Co., Wilmot, Ark.; Mrs. Sam J. Howell, Jr., Jonesboro, Ark., wife of a representative of the Jno. E. Mitchell Co., Dallas; Mrs. Richard Haughton, Sr., Dallas, whose husband is publisher of The Cotton Gin and Oil Mill Press; Mrs. S. J. Smith, Luxora, Ark. The gentleman in the picture is her husband, one of the industry's pioneers and a man loved by all who know him. Standing next to Smith are, l. to r., Mrs. F. B. Hinckley, Jr., and Mrs. F. B. Hinckley III of Dallas. Their husbands are connected with Hinckley Gin Supply Co.

Gulf Coast Ginners Will Meet at Sinton June 15

The annual meeting of the Gulf Coast Ginners, comprising Districts 11 and 12 of the Texas Cotton Ginners' Association, will be held June 15 at Welder Park, Sinton, it was announced this weeks. Dick Gerdes, Sinton, president of the regional ginners' organization, will preside. Those in attendance will be guests of the oil mills in the area at a noon barbecue. The meeting starts at 10 a.m.

Gene Flower Is Named A-D-M Ad Manager

Gene Fowler has been appointed advertising manager of Archer-Daniels-Midland Co., Minneapolis, Minn., soybean and flaxseed processors, Vice-President J. W. Moore has announced.

Fowler had handled Archer-Daniels-Midland advertising as account executive with Alfred Colle Co., Minneapolis agency, since 1945.

World Report—

1949 Peanut Output Less Than Expected

Early droughts and harvest rains cut production below previous estimates in Argentina and Africa; Asian crop was good.

World peanut production in 1949 was less than expected in earlier estimates, according to the latest information available to USDA's Office of Foreign Agricultural Relations. Total output is now placed at 10,800,000 short tons of unshelled nuts, a decrease of two percent from the 11,025,000-ton record of 1948 but an increase of 13 percent over the 1935-39 average. The decrease from 1948 is accounted for principally by crop reductions in North America and Africa.

1949 Production

The current estimate is 660,000 tons less than earlier expectations, due chiefly to the sharp revision (unofficial) in India's output. Revised estimates from French West Africa and Nigeria were also lower. Unfavorable weather was the decisive factor in the reductions of early forecasts.

• **U.S. Production Falls Below Million Tons**—The decline in North American peanut production was due almost entirely to the decrease in the U.S. crop from an all-time high of 1,169,200 in 1948 to 926,000 tons in 1949. For the first time since 1941 U.S. output dropped below the one million-ton mark. Despite this, however, 1949 production exceeded the 1935-39 average by 50 percent. Acreage allotments and marketing quotas sharply reduced the 1949 crop.

• **Mexico and the Caribbean Area**—Mexican production, as yet not officially reported, is believed to have been somewhat higher than the 1948 crop of 38,600 tons. Cuban peanut production has declined rapidly in the past few years. In 1949 only 8,500 tons were harvested, the smallest outturn since 1938. The Dominican Republic reported a crop of 23,000 tons, the largest on record.

• **Asia Had Good Crops**—The 1949 harvest in Asia exceeded 1948 by 261,000 tons, principally the result of good crops in India and China, the world's major peanut producers. India's output, now estimated at 3,680,000 tons, represents an increase of seven percent over 1948 and 12 percent over prewar. The nine percent acreage increase over 1948, together with favorable weather during the early part of the season, led to a pre-harvest forecast of approximately 4,200,000 tons. However, erratic and unfavorable weather in some areas, damage due to insect pests in other areas, and excessive rains and floods in some remaining areas reduced the current estimate to 3,680,000 tons. Prevalence of good peanut prices—the highest on record in India—was a major incentive for increasing peanut acreage in 1949.

The estimate for China remains at 3,224,300 tons or two percent above 1948 and 10 percent above prewar.

Reports indicate that Burma's harvested acreage of peanuts dropped from 650,000 acres in 1948 to about 380,000 in 1949. Production was therefore expected to have decreased proportionately. Postwar economic and political disturbances as well as adverse weather are responsible for these reductions.

• **Indonesian Reports Go Up**—The 1949 peanut crop in Indonesia has been revised upward to 346,600 tons, nine percent more than the 1948 outturn of 319,000 tons. Crop conditions, however, were not altogether favorable in 1949 because of drought and the use of poor seed in some of the producing areas. Taiwan's (Formosa) harvest was reported at 61,000 tons against 58,800 tons in 1948 and 38,500 prewar.

• **Production Was Down in South America**—South America's 1949 peanut production was down six percent from 1948. Argentina's crop has been reduced to 110,000 tons compared with 132,000 in 1948 and the 1935-39 average of 87,000. Plantings in 1949—469,000 acres—were believed the largest on record. The harvest was considered a failure, however, with very low yields following late plantings, early drought, and rains at harvest.

Official estimates indicate a record peanut crop of 153,800 tons in Brazil in 1949, a very slight increase over the 153,200 tons produced in 1948. Only about 15,000 tons were produced in Brazil in 1939.

Uruguay also harvested a record crop —14,300 tons against 10,600 in 1948 and only 1,200 prewar.

• **Bad Weather Cut African Output**—Unfavorable weather in the major peanut areas reduced Africa's output by 11 percent from 1948. The unexpected rainfall in November in Senegal, which accounts for about 75 percent of the crop, destroyed approximately 10 percent of the French West African output, lowering the 1949 production estimate to 700,000 tons. This represents a decrease of eight percent from the previous year and 20 percent from the prewar average. Considerable difficulties have been encountered during the past year in transporting these supplies from the chief producing areas in the north to the coast. More transportation equipment arrived, however, and better methods of protecting the stocks, pending sale and transportation, are being applied.

An estimated 500,000 tons of peanuts were produced in Nigeria in 1949, compared with over 600,000 in 1948. All estimates of acreage and total production are but rough approximations because peanuts are grown on small, widely scattered plots rarely larger than 2.5 to three acres. The general belief is that no sizable increase or decrease occurred in acreage planted in 1949 compared with the estimated 2,675,000 acres normally planted to peanuts. The exceedingly low yield is explained entirely by inadequate and untimely rains. It is now believed that only about 200,000 tons of shelled peanuts will be purchased for export whereas normally production for export is substantially above 300,000 tons. About 367,000 tons from the 1948 crop were purchased for export.

Considerable progress has been made in moving the backlog of nuts accumulated in the past few years. Over 421,000 tons were transported in 1949. As of April 1, 1950, a backlog of 200,000 tons awaited shipment. Railway officials believe that the entire surplus will have been moved by the opening of the new season in November.

The Gambian peanut crop is estimated at 80,000 tons, an increase of 15 percent over 1948. By January 1950, over 63,000 tons had been purchased for export.

Peanut outturn in Mozambique in 1949 amounted to only 15,000 tons, the result of unusually heavy spring rains.

In 1949 British East Africa experienced its worst drought in 45 years. The regular peanut crop in Tanganyika amounted to 8,000 tons. The ground-nut scheme, however, encountered further difficulties, and the 1949 crop was a complete failure. In both the Kongwa and Urambo districts climatic considerations have led to a downward revision of peanut plantings in favor of sunflowers, whereas in the Southern Province peanut acreage is expected by 1953 to be slightly in excess of that of sunflower.

Dry weather during the growing season reduced the 1949 peanut crop in the Union of South Africa to 67,200 tons compared with 79,400 in 1948.

1950 Prospects

It appears unlikely that 1950 peanut production will reach the record output of 1948 or greatly exceed 1949. India's acreage may increase some since domestic consumption is estimated to have shown a considerable increase. Peanut oil forms a basic raw material for the vanaspati (hydrogenated vegetable oil) factories, which have a capacity of approximately 250,000 tons but have been operating far below capacity. The decision of the government that vanaspati is harmless for edible purposes (following a growing controversy on this subject) portends increased consumption of peanut oil in the future. The government of India-sponsored Panel on Oils and Soaps Industries recommended (December 1948) increasing production to 6,000,000 tons within a period of five years.

China's peanut production is not expected to increase in 1950. Production in the African countries can be expected

INCREASE
YOUR POWER PRODUCTION PROFITS WITH
INTERNATIONAL DIESELS...

Giant of the Gins—the International UD-24 Diesel Power Unit—180 h.p.

SEE YOUR
INTERNATIONAL POWER UNIT DEALER OR DISTRIBUTOR...

to continue fairly constant if normal weather prevails. No appreciable expansion is anticipated from the various peanut projects, since progress to date has been slow.

In the U.S., the March 1 intentions indicated 2,150,000 acres to be utilized for picking and threshing this year. If this acreage is realized and the 1944-48 average yield for each state is attained, production would be about 200,000 tons less than in 1949. The acreage allotment for 1950 has been revised upward from 2,100,000 to 2,200,194 acres.

Leafworms Make Earliest Arrival Since 1943

Cotton leafworms were found May 10 in Zapata County, and on May 11 in Cameron County, Texas, USDA's Bureau of Entomology and Plant Quarantine reports. The specimens were mailed to the Bureau's Division of Insect Indentification in Washington where insect experts have now verified the indentity of the insects.

May 10 is the earliest record for this important defoliating cotton pest in the U.S. in eight years. The data of arrival may determine the amount of damage caused later to the cotton crop.

The cotton leafworm thus joins the boll weevil, grasshoppers, greenbug, European corn borer, screwworm, and cutworms in building up to what may be a serious insect situation for 1950.

Cotton leafworms fly north as adult moths from the tropics each year. Some years the pests do not get as far north as the U.S. until July, and in most years they do not infest the entire Cotton Belt. There is no authentic record of their occurrence in California.

Records maintained by the Bureau since 1922 indicate that the earliest date of finding leafworms in this country was April 7, 1943, and the latest was July 18, 1949.

When the pest reaches this country late in June or July, it normally causes little destruction to the cotton crop. When it arrives earlier, it has the opportunity to rapidly increase in population. During some such years great swarms of the moths move north across Texas into other cotton-growing areas, leaving eggs on leaves in many cotton fields over which they migrate. These eggs hatch into hungry leafworms that strip cotton plants of their leaves. The leafworms eat nothing else. If such defoliation occurs early in the season, the plant has no chance of putting on a full crop of cotton.

Leafworms sometimes defoliate cotton fields late in the season. Many farmers figure the removal of leaves from the cotton plants by leafworms at this time is a good thing. Such defoliation by leafworms, however, usually lowers the grade of the crop.

Early migrations of leafworm moths this year mean just one thing: farmers must control the insect if it starts to defoliate cotton fields early in the season.

ACCO
COTTON AND COTTONSEED PRODUCTS

ANDERSON, CLAYTON & CO.
(INCORPORATED)

HOUSTON, ATLANTA, MEMPHIS
BOSTON, LOS ANGELES
NEW ORLEANS, NEW YORK

O'Connor Succeeds Butler as Borden's Soy Co. Head

On June 15 Edward M. O'Connor will become executive vice-president and general manager of Borden's Soy Processing Co., soybean processing division of The Borden Co., to succeed Clifford E. Butler, who is retiring to devote more time to other business interests.

O'Connor has been associated with Borden's Soy Processing Co. since 1940 as vice-president.

Butler will continue with Borden's in an advisory capacity. The soybean processing division of the New York firm operates soybean oil mills at Kankakee, Ill., and Waterloo, Iowa, with headquarters at Waterloo.

Also effective June 15, P. J. Queroli, assistant treasurer, will take on additional duties as assistant secretary, succeeding J. W. Henderson, retired.

J. A. Sutherlin Represents Chase at New Orleans

Appointment of John A. Sutherlin as sales manager of Chase Bag Co.'s New Orleans branch has been announced by J. H. Counce, manager at New Orleans.

Sutherlin has been a salesman with Chase in the New Orleans territory since he was released from military duty as a pilot in the Army Air Forces during World War II. He will have eight states in the South and Southeast in his territory, with New Orleans as his headquarters.

Canada Expects Increase in 1950 Flaxseed Acreage

Canada's official announcement of farmers' intentions to plant flaxseed indicates an increase over last year's harvested acreage. The 1950 total for Canada is 497,000 acres, of which 482,000 acres or 97 percent will be in the Prairie Provinces. In 1949, 321,000 acres were harvested.

Based on the long-time (1908-1948) average yield of eight bushels per acre, the 1950 flaxseed harvest should be about 4,000,000 bushels compared with 2,262,000 last season and 17,683,000 in 1948.

Palm Oil and Palm Kernel Exports Show Increase

Palm oil and palm kernel exports during 1949 from principal producing areas of world showed marked increases over 1948 and approximated pre-war level. Oil exports were slightly less than before the war, but kernel exports exceeded that period by a small margin.

Approximately one-third of the palm oil entering international trade and about one-half of the volume exported from Africa normally originates in Nigeria. In 1949 palm oil exports attained a record of 179,200 tons. The total quantity went to the United Kingdom.

Super Advertising
21 RADIO STATIONS
92 NEWSPAPERS
Are Selling MORE COTTON SEED OIL PRODUCTS

Mrs. Tucker's FOODS, INC.
SHERMAN, TEXAS

Classified Advertising

RATES: Nine cents per word, per insertion. Include your firm name and address in count. Minimum advertisement $2.00. Strictly cash basis—enclose check with order. Write copy plainly.

Oil Mill Equipment for Sale

FOR SALE—Oil mill equipment including Anderson expellers and French screw presses.—Pittock and Associates, Glen Riddle, Pa.

FOR SALE — Three-section cage French screw presses with 40 h.p. flange mounted motor and tempering bin. Also No. 1 Anderson expellers, belt driven, attractively priced. Inquire—Box 493, care The Cotton Gin and Oil Mill Press, P.O. Box 444, Dallas 1, Texas.

FOR SALE—4 14 box hydraulic presses complete. One D. K. hydraulic pump. One accumulator. One D. K. cake former. One Fort Worth cake stripper. One Bauer cake breaker. One Fort Worth hot cake cutter. All now in operation. Attractively priced for July delivery. Inquire—Box "LW," c/o The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

FOR SALE—Two rotor lifts 25 ft. long.—Kenedy Cotton Oil Mill, Kenedy, Texas.

Gin Equipment for Sale

FOR SALE—1 Model 40 all steel 72" condenser with dust flues and 1 all steel 60" Hardwicke-Etter condenser. — Lamesa Gin Co., Lamesa, Texas.

FOR SALE—Six cylinder all steel Neverchoke Cleaner, all steel Murray Separator, all this is in good shape. $250—J. O. Williams, Frost, Texas.

FOR SALE — One 5-cylinder all steel Murray cleaner; one 10 ft. all steel Lummus Bur Machine —W. H. Ritchey, Haslet, Texas.

FOR SALE—1 extra good set of 5 60" Hardwicke-Etter huller cleaner feeders, factory reconditioned, 4200 bales back 1 year ago. Cost repair $1800. For $250 each.—Bill Smith, Abilene, Texas.

FOR SALE—Please don't overlook some of the wonderful Gin buys I now have to offer. Write, wire or call M. M. Phillips, Phone 3-1171, P. O. Box 1288 Corpus Christi, Texas.

ELECTRIC MOTORS
Sales — Repairs
890 ROCKWOOD
New Paper Pulleys in Stock
All Sizes
V-Belts & Sheaves
Also
New and reconditioned guaranteed cotton gin motors in stock for immediate delivery.
300 hp. 3/60/2300/600 rpm, slip ring
250 hp. 3/60/440/600 rpm, slip ring
200 hp. 3/60/2200/900 rpm, slip ring
200 hp. 3/60/440/900 rpm, slip ring
150 hp. 3/60/2300/900 rpm, Squirrel cage
150 hp. 3/60/440/720 rpm, squirrel cage
125 hp. 3/60/440/900 rpm, slip ring
125 hp. 3/60/2200/900 rpm. squirrel cage
125 hp. 3/60/440/900 rpm. slip ring
100 hp. 3/60/2200/900 rpm, squirrel cage
100 hp. 3/60/220/900 rpm, squirrel cage
100 hp. 3/60/2200/900 rpm, slip ring
75 hp. 3/60/440/900 rpm, slip ring
75 hp. 3/60/220/1200 rpm, squirrel cage
Fan and Press Pump motors and all other ratings in stock.
Call on us—day or night—anywhere.
Complete starting equipment available for above motors. Free rental while we repair your motors.
P. O. Box 7775 Phone H8-2801
W. M. Smith Electric Co.
DALLAS, TEXAS

Speaking of

QUICK Results . . .

W. D. Waddle, ginner from Greenville, Texas, dropped by the offices of The Cotton Gin and Oil Mill Press on May 25 and placed a classified advertisement with us offering lint cleaners for sale.

The advertisement first appeared in the May 27 issue, which did not reach most readers before Monday, May 29. Mr. Waddle, however, had sold his cleaners by noon Monday to a reader of the "Press" from West Texas who had received his copy of the magazine on Sunday, hopped in his car and arrived at Mr. Waddle's gin early Monday morning.

CONTINENTAL GIN OUTFIT—4-80 saw Continental Munger air blast gin outfit, all or any part of this plant, with or without building and steam plant. Principal items consist of Munger direct connected air blast gins, right hand lint-flue and 60" all steel condenser, Continental "Paragon" heavy duty steel bound press with E-J tramper, hydraulic ram and casing. Four 66" Mitchell pressed steel ball bearing flat belt "Super" extracting feeders with conveyor and steel supports. Belt distributor, two cyl. 60" all steel Lummus air line cleaner, 7 cyl. wood frame Stacy straight line gravity cleaner with Hardwicke-Etter dropper. One Hardwicke-Etter double hopper seed scale, two bucket elevators, conveyors, transmission equipment, etc. A complete plant from suction to press room. All excellent condition, really priced to sell, for removal.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

NEW GIN BUILDINGS—30 x 90 with 36 ft. suction sheds, foundation included. Delivered and erected in Texas. $6910.00—Marvin R. Mitchell Construction Co., 1220 Rock Island, Dallas, Texas, Phone C-5615.

EXTRACTING FEEDERS — Four 66" Mitchell FEC ball bearing "Super" pressed steel "double deck" flat belt extractors, each top section has one pre-cleaning cylinder, machines complete with suoports and conveyors, excellent condition. Four 66" F.E.C. pressed steel standard 1935 model extractors. Four 66", 1932 model F.E.C. pressed steel feeders. Two 66", 1940 model pressed steel convertible V-belt driven extractors. Five 66" F.E.C. Mitchell cast iron ball bearing machines. One 58" Mitchell cast iron B.B. F.E.C. extractor with two pre-cleaning cylinders. Four 66" Continental model "C" Triple X extractors complete with conveyors, etc. Three 60" Model "D" Continental Double X extractors. Two 60" Model "D" Continental Triple X extractors. One 70-saw Murray Blewett steel V-belt driven extractor with conveyor and supports. Good equipment at reasonable prices.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—One steel bound Cen-Tennial "Pioneer" special press, non leak ram, full length bottom sills, heavy 12" I beam center and end columns, balanced doors. Doors release with hand wheel—W. H. Ritchey, Haslet, Texas.

TOWER DRYERS—Automatic gas-butane heaters, cross blow boxes, blow box separators, fans, all sizes galvanized air pipe and fittings in Waco stock and available for prompt shipment. Strictly high grade, fully tested and proven equipment at prices you can afford to pay. Ask for descriptive literature and list of satisfied users.—R. B. Strickland, 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE OR TRADE—Two well located gin plants. Run 6,000 bales last year. High acreage allotment. Owner retiring.—Box "F," The Cotton Gin and Oil Mill Press, Box 444, Dallas 1, Texas.

AUTOMATIC gas heaters delivered and installed in your gin plant. See advertisement on page 55 this issue. Service Gin Co., P. O. Box 21, Ville Platte, La.

FOR SALE—On account of a manager's death have decided to sell gin at Rule, consisting of 4-80 Continental gin, steam power, 14 ft. Hardwicke-Etter bur machine, double Mitchell feeders, big Lummus cotton dryer, ¼ block of land and residence. Priced to sell.—P. O. Box 1118, Abilene, Texas. Telephones: 5467, Res.; 8489, office.

BUR EXTRACTORS—One 14 ft. rebuilt Hardwicke-Etter, wood frame extractor. One 14 ft. Lokey rebuilt wood frame extractor. One new 14 ft. all steel Wichita extractor, ready for delivery. Other makes and models usually available at reasonable prices.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE: GINS—5-80 Murray gins with new fronts and lint flue. 5-80 all steel Model "B" 1936 Continental brush gins with 1938 model flat belt Super Mitchells. 5-80 all steel model "C" Continental gins with A. B. fan and attachments with 1936 model flat belt Super Mitchells and drier. Cen-Tennial Commander gins. 1 slightly used 5-80 1949 model Continental lint flue. 1 good late 5-80 Murray lint flue. EXTRACTOR FEEDERS — 5-80 66" flat belt Super Mitchell with drier. 5-80 flat belt drive Super Mitchells. 10-80 "FEC" 66" flat belt convertible Mitchells. 4-80 "FEC" 66" Standard Mitchells. 5-80 60" flat belt convertible Mitchells. 5-80 Master Double X Continental double V belt drive three years old. All above pressed steel and in good condition. 5 60" Hardwicke-Etter huller feeders with double V drive and four cylinder after cleaner. 5-80 Hardwicke-Etter huller feeders. BUR MACHINES—1 12" center feed all steel Murray. 2 10 ft. Hardwicke-Etter bur machines. One 14 ft. Hardwicke-Etter bur machine. 2 10 ft. steel Wichita bur machines. 1 14 ft. all steel Wichita. DRIERS —3 12-section Thermo-Cleaners. 1 16 section Thermo-Cleaner. CLEANERS—1 all steel 5 cyl. Wichita inclined cleaner with or without intake and outtake drier connections. 1 7- cyl. wood H. E. cleaner. MISCELLANEOUS—1 Murray 72" steel condensor. 1 Continental center wheel crank steel bound press. 1 18x72 boiler. 1 14x15 Skinner engine. 1 50" Lummus fan. 1 Murray tramper. 1 Dixie tramper, 1 all-steel Cameron tramper, and various other items.—Bill Smith, Box 694, Abilene, Texas.

FOR SALE—Nine 66" super Mitchell units; 5 66" standard Mitchell units; 5 60" standard Mitchell units. Will sell 1 or more units.—W. H. Ritchey, Haslet, Texas.

FOR SALE—Five Hardwicke-Etter huller-cleaner-feeders for 80-saw gins.—Farmers Co-Op Gin Company, Maypearl, Texas.

FOR SALE—Fairbanks seed scales, $150; 150 ft. 9" conveyor, 90 cents ft., 4 angle drives, $3.50 each; Wood press with ram, casing, steel sill, $225. 72" wood condensor, $50; Beaumier press pump, new piston and packings, $65; 30 ft. 2-15/16" shafting; 12 ft. 3-15/16" half prices. 1 50x16 steel split pulley, $35; 1 30x15 steel split pulley, $25; Also for $50, 5 ball bearing brush gins and feeders—Manor Gin, Manor, Texas.

CLEANERS AND DROPPERS—Now in stock. One 52", 6-cyl. Murray all steel straight line gravity cleaner with steel "fan type" cylinders and screw type dirt pan, like new. Two 52" Murray steel "Quad" incline cleaners. One 6-cyl. 48" Lummus, wood frame, straight line B.B. cleaner. One Hardwicke-Etter 5-cyl. incline 50" wood frame cleaner with steel cylinders. Two Continental 4-cyl. wood frame cleaners. One 60", 2-cyl. Lummus steel air line cleaner. One 7-cyl. Stacy wood frame, straight line gravity cleaner. DROPPERS One 50" type "M" Lummus steel B.B. separator. Two type "MS" Murray 52" steel revolving droppers. One 42" Stacy revolving drum wood dropper. One 50" Hardwicke-Etter wood type revolving drum dropper. New Stacy steel droppers and steel revolving vacuums. It will pay you to get our prices before buying.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—5-80 Continental brush gins; 5-80 FEC Mitchell feeders, saws in good shape on feeders and gins. One 6 cyl. horizontal cleaner; one 5-80 lint flue complete, excellent condition. One 50" bottom section Murray dropper, good condition. All for $2,000.00. Will sell separate.—Cotton Farmers Cooperative Gin, Hobart, Okla.

PRESS BARGAIN—One Lummus "down packing," long box type, fully steel bound heavy duty "swing door press" with practically new hydraulic ram and casing and with Lummus steel automatic tramper, an excellnt press, priced reasonably.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—3-80 saw Continental Munger direct connected V-belt driven brush gins. With Model 30 huller fronts. Gins in excellent condition, being rebuilt at factory last year. Half price. Write or telegraph—L. M. Arnold, Statham, Ga.

GINS AND GIN OUTFITS—Do you need more capacity? We can furnish from stock one extra gin and feeder to match most any make or model gin. AIR BLAST GINS—4-80 saw Munger B.B. direct connected, with lint-flue. 4-80 saw Murray steel B.B. direct connected with lint flue. 5-80 saw Lummus "Automatic" B.B. direct connected, with left hand lint-flue and excellent condition, $750.00 for quick sale. 5-80 saw direct connected Gullett air blast gins, good operating order, $90.00 each. Visit us and inspect these gins and others in our stock. For real bargains in cotton gin machinery of any kind, contact us. Also several complete outfits.—R. B. Strickland & Co., 13-A Hackberry St., Tel 2-8141, Waco, Texas.

FOR SALE—Due to putting in larger cleaners and driers, have the following equipment: 1 all steel Hardwicke-Etter 70" 11-shelf tower drier with conduit and 6 cyl. 70" all steel drier cleaner with pulleys, supports and pan. Also piping and valves from burner to tower, also thermometer. Above equipment in extra good shape. New price, $2,977.00. Will sell for $1,475.—Palo Alto Gin, Bishop, Texas.

Equipment Wanted

WANTED TO PURCHASE—Cotton compress preferably iron post, knocked down. Write—Gulf Shipside Storage Corporation, P. O. Box 1495, New Orleans 16, La.

WANTED—14 ft. all steel Hardwicke Etter Bur Machine—J. O. Williams, Frost, Texas.

WANTED — Two Complete Hydraulic Presses, 13-5/8 x 13-3/4 boxes, preferably French. Contact —Minden Cotton Oil & Ice Co., Minden, La.

WANTED—All steel 14 ft. Hardwicke-Etter bur machine with cleaners, in first class condition. Quote the lowest cash price.—I. M. Solberg's Gin, Clifton, Texas.

WANTED—4-80 saw late model Super Mitchells; also 14 or more shelf government type tower dryer. — Farmers Gin & Warehouse Company, Brundidge, Ala.

WANTED—Modern first class sheet metal shop in location or equipment for removal. Detail list of equipment and stock with firm offer.—P. O. Box 1559, Corpus Christi, Texas.

Personnel Ads

GINNER WANTED—Must be good and furnish references. Have nice four room cottage, shower, electric lights. Gin is modern in every respect and is located in one of the best cotton counties in Arkansas. All correspondence confidential—Address Box "ARK" care The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

GIN SUPERINTENDENT WANTED — Experienced cotton gin superintendent wanted to repair, maintain, and operate modern electric gin plant doing large volume of business. Location Eastern Arkansas. Must be high class in every respect, of good mechanical ability, know how to gin cotton for grade, and keep plant in good mechanical condition. This is a permanent position, and will pay good salary. In replying, give history of employment for the past ten years, with references—Address Box "KE" care of The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas, Texas.

OIL MILL superintendent with 9 years production experience desires to return to production after five years of research and development on cottonseed preparation methods, hydraulic and screw pressing and solvent extraction. Resume' and references on request. Address—Box 710, care The Cotton Gin and Oil Mill Press, P. O. Box 444, Dallas 1, Texas.

WANTED—Position as cottonseed oil mill superintendent or night superintendent. Twenty-five years experience including gins, fertilizer plants, and machinist. Mill ranging from 150 to 220 tons. Best of references. Now employed. Address—Box E-96, c/o State Record, Columbia, S. C.

WANTED—Job as ginner. Lifetime of experience all phases of gin work. Also do carpenter work, form building and pipefitting. Would like connection in the west, but will consider any place. References. Write—A. V. Saucier, 4101 Webster St., Monroe, La.

Power Units and Miscellaneous

FOR SALE—One rebuilt 8" x 9" four cyl. Twin City engine. Sales and service on all sizes of Twin City engines.—Fort Worth Machinery Co., 1123 East Berry, Fort Worth, Texas.

SPECIAL POWER VALUES—Two 8-cyl. and 2 12-cyl. LeRoi engines, rebuilt. One 120 h.p. model GAK, 6-cyl. Waukesha. One 80 h.p. 4-cyl. rebuilt engine. One 80 h.p. model 32 Fairbanks-Morse diesel priced low. One 35 h.p., 4-cyl. power unit $350.00. One 25 h.p. Fairbanks-Morse, 220 volt, 900 r.p.m. motor with starter. New Buda gas and diesel engines. New Westinghouse motors.—R. B. Strickland & Co., 13-A Hackberry St., Tel. 2-8141, Waco, Texas.

FOR SALE—40 h.p. Tips oil engine, complete, $400.00; 1 Murray Master six cleaner, $250.00; 1 Murray steel separator, $150.00; Smith-Triplex saw filer with motor, $50.00. All in first-class condition.—Seidel Bros., Brenham, Texas.

FOR SALE—One 18" x 42" L. H. Murray Corliss steam engine, 14 ft. fly-wheel, 25" face. In good condition—Ruston Oil Mill & Fertilizer Co., Ruston, La.

FOR SALE—International cotton picker, bought brand new in July last year. Picked 11 bales of cotton last season. Any reasonable offer accepted —Box "VW" The Cotton Gin and Oil Mill Press, Box 444, Dallas, Texas.

FOR SALE—1 13,000 Caterpillar. 1 D17,000 Caterpillar, all cotton gin power units reconditioned and ready to go. Two 1210A twin engines Minneapolis-Moline power units. All in perfect condition for cotton gin power. One year old. One Minneapolis-Moline NEU 4 cyl. butane or natural gas engine in good condition with V-belt drives. One 125 h.p. electric motor with starting switch.—Bill Smith, Abilene, Texas.

FOR SALE—1 25 h.p. Erie boiler good as new, with gas burner and automatic control. 1 75 h.p. Westinghouse electric motor.—Wilde Gin Co., Rowena, Texas.

FOR SALE—Sixty h.p. Fairbanks-Morse electric motor in good condition. Swing switch, 900 r.p.m. 220 or 440 volts.—James Simpson, Nueces Co-Operative Gin Co., Star Route, Corpus Christi, Texas.

FOR SALE—One million B.T.U. Mitchell butane gas burner, vaporizer and large gas tank, $1,000.00. Used two seasons—Irick Bros., Vance, S. C.

Delta Council Discusses Seasonal Labor Exchange

Both intrastate and interstate recruitment of workers to fill peak season needs for cotton chopping and picking were discussed May 26 when Delta Council representatives met with officials of state employment services and the Florida Fruit and Vegetable Growers Association to plan an exchange of seasonal farm labor with Florida and Alabama.

It was estimated that 5,000 out-of-state workers would be needed to pick the Mississippi cotton crop this year. Florida fruit and vegetable growers need labor during the winter, when Delta farm jobs are scarce. Alabama has a surplus of Negro farm workers who want to pick cotton in Mississippi, it was said.

Tennessee Department Uses Educational Service Folder

Tennessee State Department of Agriculture has obtained copies of the Educational Service folder, "How Cottonseed Serves You," to use in answering requests for cotton information that they receive from students and others.

"Your folder tells a full story about cotton, and of course the pictures are representative of any cotton state," Louis D. Wallace of the state department commented to Educational Service officials.

Drifting Weed Killer Is Injurious to Cotton

If cotton leaves become narrow, long, thick, and frazzled on the edges, it is usually safe to assume that someone in the community has been using one of the weed killers, such as 2,4-D, O. N. Andrews, Alabama Extension Service cotton improvement specialist, has warned Alabama farmers.

"Cotton yields may be greatly reduced, particularly if injury occurs in the fruiting stage," said Andrews. "For this reason, farmers who use 2,4-D or other weed killers should take every precaution to prevent spray from drifting to nearby cotton fields or other susceptible plants. Instances of spray materials drifting over 500 yards were reported in 1948 and 1949. With this fact in mind, weed killers should be applied only on a still day."

He added that coarse sprays are less likely to drift than fine high-pressure sprays. He advised using a boom hood to prevent drift, and pointed out that ester forms of 2,4-D are more dangerous to use than sodium salt or ammine salt forms. Even though drift of the ester is prevented, it will be found that when the wind changes it is possible that fumes will injure cotton or other plants subject to damage, he declared.

South Africa's Sunflower Seed Harvest Is Up

The Union of South Africa's 1949-50 sunflower seed crop exceeds that of last season, although the peanut crop is down. Preliminary unofficial estimates place the sunflower crop at 35,000 tons, compared with 20,000 in 1948-49 and less than 2,000 prewar. The only significant change in other oilseeds is an increase in cottonseed. Outturn for 1949-50 is estimated at about 8,000 tons, compared with 2,000 in 1948-49 and 1,000 prewar.

Production will be sufficient to supply domestic requirements of peanuts and oil and sunflower seed and oil, with the possibility of some exportable surplus of sunflower seed oil.

Legislation is now being considered, and there is a strong likelihood of its passage, for unlimited manufacture of white margarine. Should this legislation pass, more of the locally produced vegetable oils will be used for the production of margarine and consumed in South Africa. The Ministry of Agriculture through the Dairy Industry Control Board is expected to control the production of margarine to protect the dairy industry, if necessary.

Ralph Prater, Founder of Pulverizer Firm, Dies

Ralph Prater, 54, chairman of the board of the Prater Pulverizer Co., Chicago, died at his home in Van Nuys, Calif., May 25. He founded the machinery manufacturing firm some 30 years ago.

Survivors include his wife; a son, Robert Prater; and a sister, Patricia Prater.

• More than 50 percent of the entire American population derives its income from producing, processing, handling, transporting, and distributing food.

Cotton Hits the Comeback Trail

(Continued from Page 23)

that obtained with the two commercial planters. The same treatments were given each plot throughout the season.

"The second test was set up to make harvesting studies. Eight different varieties were used and three different machines. We tried to determine the effect of plant height, etc., on harvesting, and found that in a range of height from 38 inches down there was no effect caused by plant height. We had no test on plants above 38 inches."

• **New Stripper Developed**—Last year Robert H. Witt of the Agricultural Experiment Station designed and supervised the construction of a new roller-brush type cotton stripper at the Cotton Research Station at Chickasha. The machine gave excellent results in tests at the station, although it was not completed in time to see operation throughout the harvesting season.

Another project of the Experiment Station is a research program on the development of a general all-purpose sprayer for applying insecticides, herbicides, defoliants, etc., but which—like all such machines—cannot be used for applying 2-4D.

The Farm Demonstration Programs

• **Get Results to the Farmer . . . Quickly**—In planning an all-out attack on the factors that have pushed Oklahoma to the lowest rung on the cotton-production ladder, educational, research and industry leaders realized that one of their biggest problems was to make experimental results easily and quickly available to growers. Farm demonstrations of several types scattered over the cotton-producing areas of the state seemed to offer the most effective means of accomplishing this.

These demonstrations were conducted on a wide scale in 1949 by the Extension Service — the educational arm of the A. & M. College—and the Experiment Station. Extension Director Shawnee Brown and Experiment Station Vice-Director Hawkins, fully aware of the enormity of their task, assigned top-flight men to the job of conducting the demonstrations. For the Extension Service, J. D. Fleming got the assignment and Jim Tomlinson was named to spearhead the demonstration work for the Experiment Station.

The Extension Demonstration Program

• **Every Production Phase Covered** — Fleming reports that last year county agents, ginners, crushers, veteran instructors, and vocational agriculture teachers conducted nearly 800 cotton production demonstrations throughout the cotton producing areas of the state. The demonstrations were visited during the season by thousands of farmers who observed and studied under field conditions in their own communities many practices which resulted in higher yields, improved cotton quality, and thus increased net farm income.

"We realize," Fleming says, "that the low yield per acre for the state does not make cotton production profitable on many farms. That is why our efforts this past year were concentrated very largely on this item and the many factors which have an influence on yield.

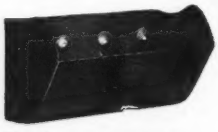
"We stressed the soil improvement program and the selection of more productive land for the production of cotton; and in regard to this phase of the work the county agents had 84 demonstrations on cotton production in rotation with a legume, and 120 demonstrations on a complete cotton production program which covered such phases as seedbed preparation, planting, cultivation, insect control, harvesting, etc.

• **Big Increases in Fertilizer Use**—"Oklahoma in recent years," Fleming reports, "has been using increased quantities of fertilizer. The many variable factors in the state which affect the profitable use of fertilizers have been pretty well brought out by 183 fertilizer demonstrations conducted by the county agents. The use of adapted varieties was stressed and attention focused on the most productive varieties by the use of 65 cotton variety demonstrations. We believe we are making considerable headway in standardizing the varieties of cotton produced."

• **Insect Control Program Intensive** — One of the most intensive programs carried out in 1949 was the cotton insect control program in Eastern Oklahoma. In all, there were 265 insect control

"HAMMOND" means

Finest Quality in Screw Conveyor and Bucket Elevating Equipment



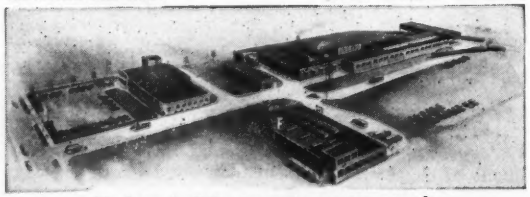
The famous "NU-HY" Bucket for Grain and granular materials.

Helicoid and Sectional Flight Screw Conveyor fabricated in all standard as well as in special sizes.

"Tite-Seal" Conveyor Box. "U" edging and Cover Clamps eliminate bolts and nuts.

Streamlined Hangers All Types

Ball and Roller Bearing End Thrusts of Superior Design.



We have facilities to meet your every need.

Our large plant is equipped with the latest machinery and equipment to offer you speedy delivery on all your requirements. Being specialists in the manufacture of conveying and elevating equipment is your assurance of smooth functioning performance through an understanding of your problems.

Write for Cat. No. 749.

Screw Conveyor Corporation

725 HUTCHISON ST. HAMMOND, IND.

MANUFACTURERS

1 53

Good in 1896

Mighty Good in 1950!

Yes, there's been some mighty changes made at Briggs-Weaver since 1896 . . . but, they've all been good . . . if good is measured by growth, increasing facilities to serve Southwestern industry with famous products and the technical "know-how" of an expanding Briggs-Weaver staff.

HOUSTON-300 S. Wayside Drive - Yukon 5486

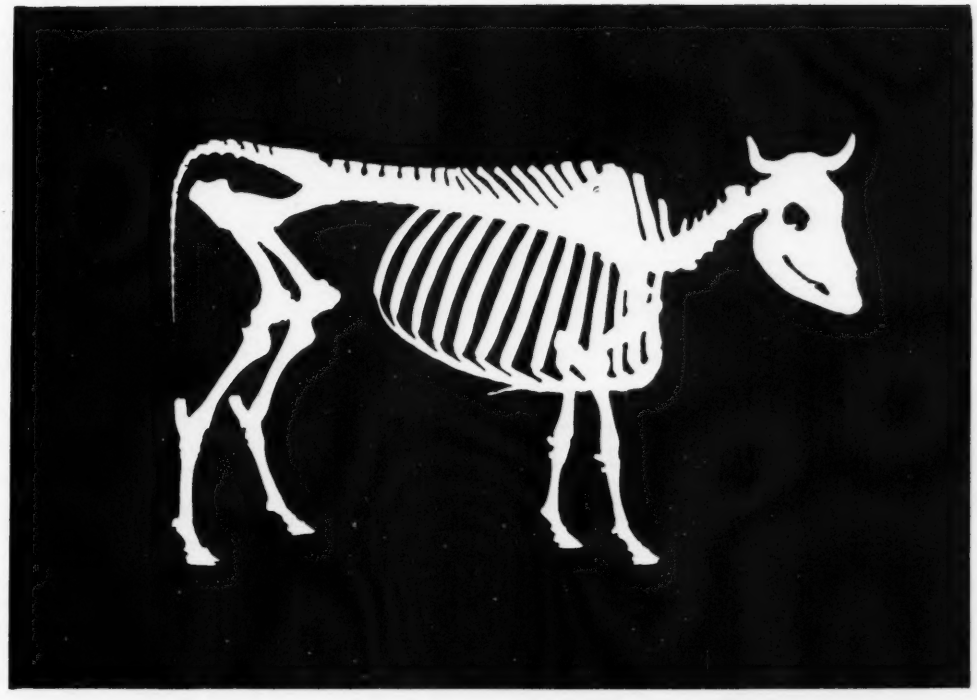
BRIGGS-WEAVER

MACHINERY COMPANY

Distributors of Industrial Machinery Machine Tools • Pumps and Motors

Since 1896

DALLAS-5000 Harry Hines - Justin 8-8311



AMMONIA NITROGEN puts on the MEAT

Ammonia nitrogen, fed to pasture land, puts on the meat, fattens the harvest of T-bones. For dairies it means more well-fed cows per acre, and higher milk production. And better-fed work stock, and hogs. Ammonia nitrogen increases the protein content as well as the yield of grain and grass crops.

High-nitrogen fertilizer applied in the Fall gives the rapid start necessary to building a year-round pasture program.

CSC produces anhydrous ammonia, the most concentrated and economical commercial source of nitrogen, at its Sterlington, Louisiana plant. The major part of this production is going to Gulf Coast manufacturers for conversion into high-nitrogen fertilizers.

PRODUCTS OF THE AGRICULTURAL DIVISION
Anhydrous Ammonia • Benzene Hexachloride
Choline Chloride • Condensed Distillers'
Molasses Solubles • Dilan • Ethyl Formate
Metaldehyde • Niacin • Buty Fermentation
Solubles and Riboflavin Feed ngredients

CSC
COMMERCIAL SOLVENTS CORPORATION
17 East 42nd Street, New York 17, N. Y.

demonstrations in the state last year. C. F. Stiles, Extension entomologist, headed up this work, the effectiveness of which can be measured by the fact that 3,885,000 pounds of insecticides were used. Except for 68,000 pounds of calcium arsenate, the poisons used last year consisted almost entirely of the new insecticides 3-5-40 and toxaphene. The 3,885,000 pounds used in 1949 compares with 1,980,000 pounds used in 1948 and 2,025,000 in 1947.

F. A. Fenton, head of the Entomology Department of the Agricultural Experiment Station at Stillwater, has stated that Eastern Oklahoma's greatest single need is a more vigorous fight against the boll weevil. The great increase in the use of the new insecticides by growers in that section of the state indicates that they are aware of the important place insect control occupies in the overall program to lower cotton production costs and increase profits.

Last year there were six special demonstrations of cotton under irrigation, one demonstration in the sandy lands of Harmon County on deep plowing in which part of the clay subsoil was brought to the surface, and one demonstration on the use of barnyard manure.

The fact that the Oklahoma Crop Improvement Association, of which Russell Pierson, Stillwater, is secretary-treasurer, certified more cotton planting seed last year than at any time in its history is indicative of the interest growers are showing in the accelerated cotton program in the state. The county agents and ginners work in cooperation with the College, one variety-communities and producers in carrying out the seed increase program.

• **Ginners and Crushers Very Active** — County agents in cooperation with ginners, crushers, veteran instructors and vocational agricultural teachers reported a total of 781 demonstrations in 1949 on the various phases of cotton production. From the Extension standpoint, C. F. Stiles masterminded the insect-control program. Robert O. Woodward, assistant Extension agronomist, played a major part in the fertilizer demonstrations. Wesley Chaffin, Extension agronomist, was active in the overall soil improvement program and in the production of cotton in rotation with a legume.

• **Plans for 1950**—"Our plans for 1950," Fleming says, "call for the continuation of these demonstrations. In addition to placing emphasis on increased yields, we will also begin concentrating on mechanized cotton production and demonstrating those practices which will offset much of the labor cost. We do not plan to have as many demonstrations this year, but will concentrate on more complete demonstrations and consolidate as many as possible on one farm."

The Experiment Station Demonstration Program

• **Owner-Operated Farms Participate** — The Experiment Station's project of owner-operated demonstrations of balanced farming, with cotton as the hub of a rotation program, is in charge of Jim Tomlinson. The work was begun in January of last year and the first job that had to be done was to select farmers over the cotton areas of the state to do the work on their farms. Vice-Director Hawkins of the Experiment Station told Tomlinson he would consider the first year's work successful if five farmers were located who could be depended upon to carry out the program over a period of several years.

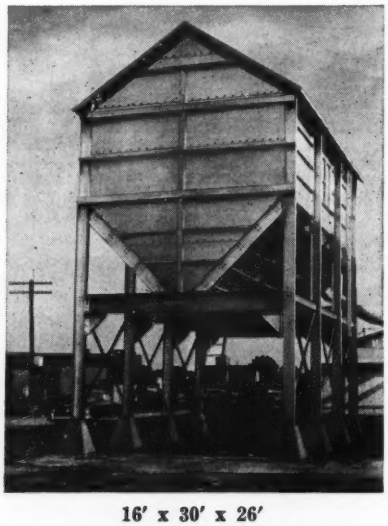
• **Twenty-two in 1949 Program**—Tomlinson selected 22 farms to take part in the 1949 program and says he believes 13 of them will stay with it. Major aim of this phase of Oklahoma's program for cotton is to provide farmers in the communities where the farms are located with factual evidence of what sound practices and a balanced program can accomplish on average land. Putting research practices that look promising into operation on the pilot farms means concurrent experiments with those at the Station. Thus, when the Extension Service and the Experiment Station release information on these practices they will already have been tested at representative farms over the state and farmers can include them in their operations without having to go through a testing period themselves. A system such as this saves a great deal of valuable time in winning converts to a new practice.

Under the old system a new farming practice would be released to county agents and farmers over the state when it had been thoroughly tested and proved by the Experiment Station. Then a few progressive farmers would adopt the practice and if it was successful others would gradually adopt it. But in such a

BRADEN
SECTIONAL STEEL BUILDINGS

ELEVATED COTTON SEED HOUSE

All Steel Construction



16′ x 30′ x 26′
Capacity—108 Tons

SELF UNLOADING
•
WEATHER-TIGHT
•
LIGHTNING-PROOF

Built in any multiple of 36 ton capacity

16′ x 10′ — 36 Ton
16′ x 20′ — 72 Ton
16′ x 30′ — 108 Ton
16′ x 40′ — 144 Ton
16′ x 50′ — 180 Ton

Structures can be supplied for corn seed and soy bean storage.

Simple, easy and economical to erect with inexperienced labor.

BRADEN STEEL CORPORATION
Long Distance 624—Teletype TU 564
1007 East Admiral Blvd., P. O. Box 1229, Tulsa 1, Oklahoma

SALES OFFICES

HOUSTON 2, TEXAS
R. W. Rogers—Phone Fairfax 8394
815 Neils Esperson Building

MEMPHIS 3, TENNESSEE
T. N. Street—Phone 38-1434
309 Falls Building

ODESSA, TEXAS
G. P. Jackson—Phone 2113
217 O'Michael Building

BRADEN Steel BUILDINGS

process many of these good practices are completely lost. Then, too, a thoroughly proved practice may have failed on a certain farm because of improper operation, but usually it was scored as a failure and soon forgotten in that area.

• **All Good Practices Stressed**—"In addition to new developments," Tomlinson says, "we will include all older practices that are known to be good. The work is not in any way intended to replace work now being done by agricultural workers in the field but is designed to help them in getting research information applicable in their own counties." County agents observed and assisted with the programs carried out last year on the pilot demonstration farms and performed a real service in getting information from these farms to other farmers in the same area.

• **Many Field Days at Farms**—Last fall several county agents held field days at the farms and used them for special group gatherings. Not only have these pilot farms stimulated greater interest in better practices among farmers in the areas where they are located, but they have encouraged ginners, crushers, county agents, vocational and veteran teachers and other agricultural workers to attack the cotton problem in Oklahoma with new vigor and enthusiasm.

Results

• **The Opitz Farm**—First-year results on the farms selected for the demonstrations were highly satisfactory. The Curtis Opitz farm located near Binger in Caddo County produced 480 pounds of lint cotton per acre in 1949. Opitz had 30 acres of cotton last year and planted his crop June 6 and 7 on average upland soil.

"The variety of cotton planted," reports Tomlinson, "was Stoneville 62, which is a fast fruiting, early maturing variety. Two hundred pounds of 4-12-4 fertilizer per acre was used at planting time. This was a heavier rate of fertilizer than was used to the best advantage on this particular soil last year. This rate gave an increase of only 30 pounds of lint per acre which was about the same increase obtained from 100 pounds of the same fertilizer.

"The interesting thing about the fertilizer was the way it pushed the cotton out and started it off. The cotton was harrowed once and cultivated twice. Total cost of hoeing and chopping was only $35 for the 30 acres. I think this is somewhat of a record for cheap cotton production in Oklahoma. I estimate the fertilizer saved at least one cultivation and $4 per acre on hoeing. The fertilizer cost was $4.20 per acre. I would say that 50 to 100 pounds of fertilizer per acre would give results equal to those obtained from using 200 pounds and prove to be a profitable practice.

"It must be remembered," Tomlinson said, "that this is average soil, an analysis showing it to be natural in acidity, medium in phosphorus, medium in potassium, and medium high in organic matter. Thus," he concludes, "there may be a possibilty of using fertilizers on some of the soils that are average in fertility and not too fine in texture in Central Oklahoma."

Winter oats were seeded in the cotton stalks on the Opitz farm and they were over-seeded in March with sweet clover. The crop rotation set up by Tomlinson for this farm is cotton, oats and sweet clover, sweet clover, wheat, wheat, hairy vetch, sweet sorghum, peanuts and cotton. "This might be called an 8-year rotation," he says, "but it is actually two separate 4-year rotations in operation at the same time.

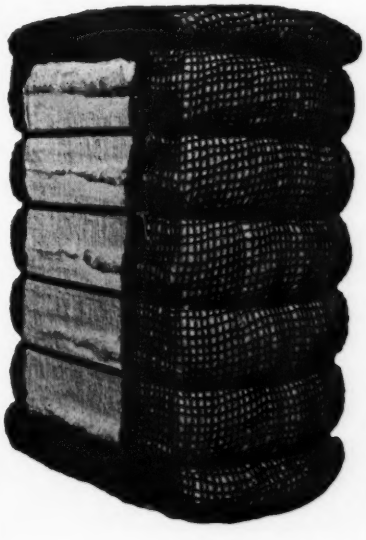
"And," he continues, "Opitz has a fine herd of registered Guernsey dairy cows that will fit well into this cropping system. He will have fall and winter pasture from the wheat, oats, or vetch, and spring pasture from the vetch and clover. There will be Johnson grass and native grass for summer pasture. The sorghum crop will be put into a trench silo for the dairy herd. Corn, feed and alfalfa crops are produced on another place and will balance out the feed for the dairy cattle. He had 65 acres of fall seeded hairy vetch and oats that gave good pasture for his cows during the winter. Part of this crop was plowed under and followed with a cane ensilage crop, and part of it was left for a seed crop to fit into its proper place in the crop rotation system."

• **The Bailey Farm**—T. A. Bailey, whose farm is near Lookeba in Caddo County, had 18 acres of cotton that yielded 603 pounds of lint per acre last year. This was Lankart 57 and was produced on the pure seed increase program. Bailey used 100 pounds of 4-12-4 fertilizer per acre on his cotton, which was planted May 31 (second planting). The cotton went into the government loan at an average price of 27.26 cents a pound. Thus," says Tomlinson, "the 603 pounds per acre had a loan value of $164.37 per

(Continued on Page 55)

PROTECT YOUR COTTON

with BELTON SUPERIOR BAGGING



- *gives maximum protection*
- *made tough for hard use*
- *makes an attractive bale*

You get maximum bale protection because "Superior" Jute bagging is a strong, OPEN WEAVE Jute bagging, weighing a full two pounds per yard. "Superior" bagging is carefully tested and constantly observed under actual conditions to insure maximum protection for your cotton.

Made right here in the South by men with the "know how," SUPERIOR is your assurance of the best in bagging and protection for your cotton.

Two full pounds to the yard.

Superior Bagging is a strong, durable open weave.

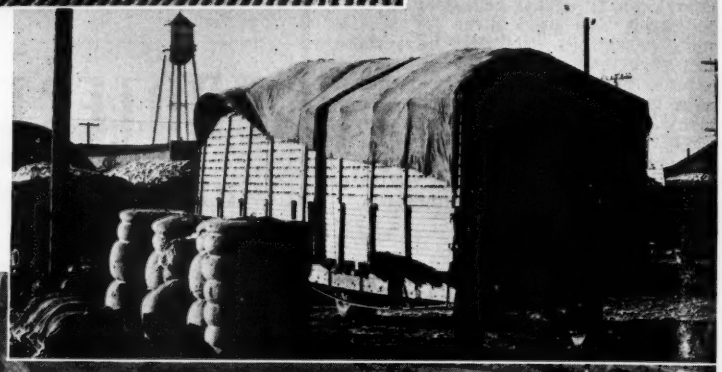
"Built to stand the pressure"

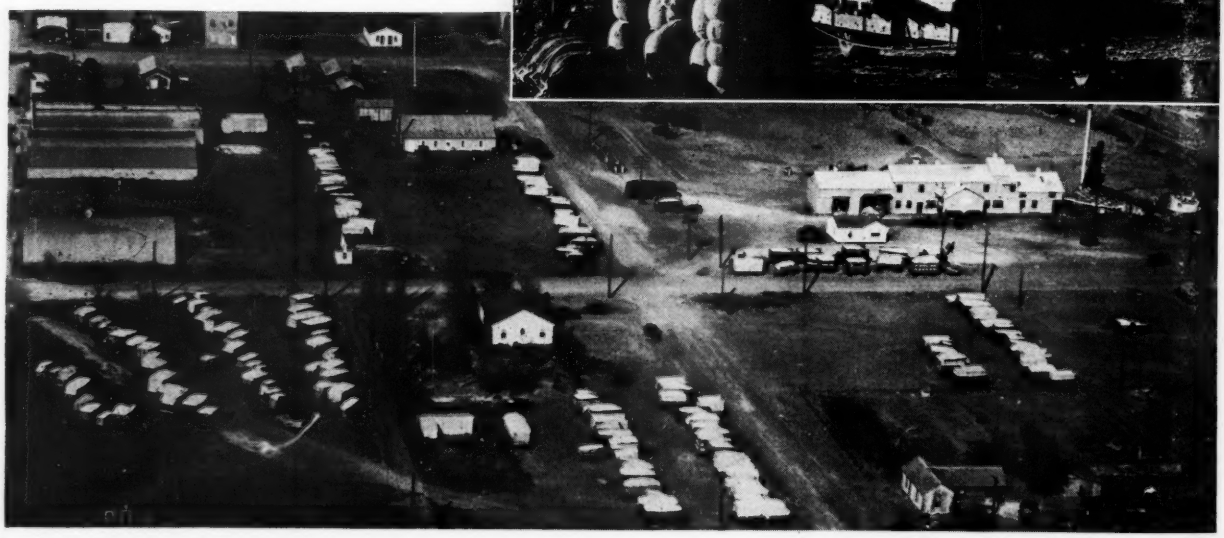
BELTON BAGGING CO.

Belton, South Carolina

■ LEFT: Mechanical strippers working on the Riggs farm north of Abernathy in Hale County on the Texas South Plains. Note piles of seed cotton at right center and in background of the picture. There were 400 bales on the ground when the strippers finished harvesting the field at the left.

■ RIGHT: This huge trailer on the yard of the Cunningham Gin at Abernathy holds several bales of seed cotton. BELOW: The Cunningham Gin can be seen in the upper right-hand corner of the picture. Scattered over the gin yard and adjoining areas, to cut down the fire hazard, are other trailers and trucks loaded with 388 bales of cotton. W. V. Cunningham, owner of the gin, lives in the white house at a little left of center in the picture.





Mechanized West Texas

It ranks as one of the world's most highly mechanized areas and is a major cotton producer

HAND HARVESTING of cotton is rapidly taking a back seat on the South Plains of West Texas since the mechanical stripper came into the picture. Two of them can be seen in the photograph at the top of this page, doing an efficient job of harvesting on the Riggs farm north of Abernathy in Hale County. Last year about 40 percent of the cotton that came to the Cunningham Gin at Abernathy was mechanically stripped. Next year the percentage of stripped cotton will be even greater.

W. V. Cunningham, owner of the gin, says he hasn't seen a horse-drawn load of cotton at his plant in five years. His gin is a modern, electric-powered 4-80 outfit with all-steel buildings and ginned 8,068 bales last year. He started ginning Sept. 20 and finished around Feb. 15. He has operated the gin for 10 years.

Cotton Hits the Comeback Trail

(Continued from Page 53)

acre. The harvesting cost was 5.6 cents per pound of lint, or $33.77 per acre. This left Mr. Bailey $130.60 sales value per acre after paying the harvesting cost. No seed is figured in since it was saved for planting, but there would have been $5.00 or $6.00 per bale from the seed over cost of ginning if it had been sold."

The second highest producing crop on the Bailey farm was peanuts, which had a gross sales value of $75.90 per acre. Bailey had 10 acres of vetch and oats as the beginning of a legume in rotation for his farm. He used rye as a cover crop on all of the peanut ground and used eight rows of grain sorghum or sweet sorghum and eight rows of peanuts for strip cropping.

• **The Johnson Farm**—On his farm at Dill, in Washita County, Ira (Mike) Johnson produced 112 bales of cotton on 90 acres last year. The cotton graded an average of 27.49 cents per pound for a gross per acre value of $171.26. Harvesting cost was 6.21 cents per pound of lint, or $38.69 per acre, leaving Johnson $137.57 gross income per acre from lint. Adding an average of $7.46 per acre from cottonseed after paying for ginning, Johnson had a total gross value per acre of $140.03 after paying for harvesting.

He had 36 acres of combine kafir that averaged 44 bushels per acre and sold at $1 per bushel, giving him a gross income of $44 per acre. He had 16 acres of rye that averaged 23 bushels per acre and sold at $2 per bushel for a gross income of $46 per acre. He had eight acres of wheat that made 34 bushels per acre and sold for $1.90 per bushel, giving him a gross income of $64.60 per acre.

The history of Mike Johnson's place makes quite a story. He bought the 160 acres in June of 1946 for $3490, or a little under $22 an acre. Based on the condition of the farm when Johnson bought it, that price wasn't as low as it looks, but when you consider the production he made on this land in 1949 it looks like Johnson may have got a bargain.

"Here," says Tomlinson, "are some of the things that changed the productive capacity of this land. Mike hired a bulldozer to level the sand knolls and fill in the low places so they would drain. He spread cotton burs over all the thinner spots and the sandiest places at the rate of six to eight tons per acre. The bulldozer worked 140 hours in 1947 and 1948 at $10 per hour.

"The practice of seeding a cover crop of rye in the cotton stalks with a good rate of fertilizer and plowing it under in the spring when 12 to 18 inches high has been responsible for most of Johnson's good yields," says Tomlinson. "Fertilizers used on the crops at planting time have also given good results, but as the soil is being built up there are less noticeable increases in cotton yields through the use of fertilizer. A fertilizer test on some of the better land in 1949 showed an increase of 93 pounds of lint cotton per acre where 50 pounds of 4-12-4 was used at planting time. On the thinner land Mike used 120 pounds per acre, and at least 80 pounds on most of the crop. He used from 125 to 200 pounds of 4-12-4 on all cover crops, plus phosphate on all legumes."

The rate of fertilizers is varied according to the land, with the better soils getting the lighter rate and the pooer soils getting a heavier rate. Johnson last year spread 160 tons of cotton burs on 20 acres and put a cover crop on every acre that did not get burs. For cover crops he had 16 acres of fall seeded sweet clover, 30 acres of rye and vetch, eight acres of wheat, and 70 acres of rye. These crops were seeded in the cotton early in September before it started to open.

• **The Holmberg Farm**—The Sam Holmberg fram at Erick, in Beckham County, has some of the same deep, low-producing sandy soil that is found on the Johnson farm. In 1949 Holmberg produced 696.8 pounds of lint cotton per acre on 10 acres that had been in sweet clover in 1946 and 1947. In 1948 this 10 acres produced a crop of grain sorghum.

"You will remember that when you visited this farm with me last July," Tomlinson said, "Holmberg had a very thin stand on about a third of this 10 acre field, but thin stand and all, this 10 acres averaged 696.8 pounds of lint per acre! You will remember, too, the cotton on Sam's north place, where he had deep plowed some of the land, plowed some at the regular depth, and where some had not been fertilized.

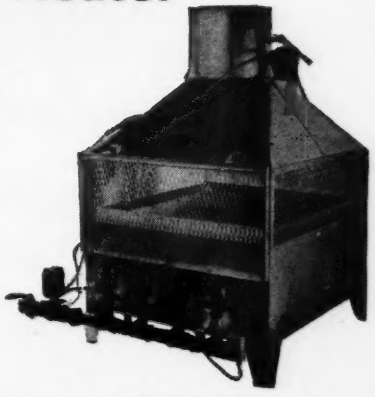
"Here are the results on that land: normal plowing with no fertilizer gave 90 pounds of lint per acre; plowing over 12 inches deep and no fertilizer gave 180 pounds per acre; normal plowing with 90 pounds of 5-10-5 gave 135 pounds per acre; and plowing over 12 inches deep

Automatic Gas Heater

An Automatic Gas Heater of over a million B.T.U. capacity that will furnish sufficient heat for any type Hot Air Dryer.

Heater furnished for Natural, Butane, Propane, or Manufactured Gas.

Heater controls are simple and efficient.



SERVICE GIN COMPANY

VILLE PLATTE, LA.

WRITE: P. O. Box 21, Ville Platte, La., or 3125 Live Oak Ave., Waco, Texas

Fine Foods

Known from Coast to Coast

Wesson Oil

America's Favorite Salad Oil

Snowdrift

Emulsorized for New Quick-Method Cakes

WESSON OIL & SNOWDRIFT SALES COMPANY

New York • New Orleans • Savannah • San Francisco • Houston • Chicago

with 90 pounds of 5-10-5 gave 297 pounds per acre."

A soil test on the land Tomlinson refers to showed it to be very low in available phosphorus and potassium and almost without any organic matter. He concludes that this soil needs a much higher rate of fertilizer than the 90 pounds used and should have some potash.

• **All Are Progressive Farmers** — Tomlinson reports that 21 of the 22 farmers in the farmer-owned demonstration program he directs made a fall seeding of a winter legume to use in the crop rotation system set up for their individual farms; and all farms that called for a spring seeded legume in the rotation made plans for such a seeding. Every one of the farmers in the program, Tomlinson reported to us, planned to use some fertilizer on the crops planted this spring. In addition, every farmer in the boll weevil area followed the recommended insect control program last year.

Seven of the farmers were in the cottonseed increase program last year. They planted foundation seed from the Experiment Station, kept the seed pure, and have supplied registered seed from them. Fourteen of the participating farmers conducted variety tests last year. These tests were not a part of the Experiment Station's program but were conducted by the farmers to help them decide on a good variety for their own farms. Six of the farmers in the eastern part of the state seeded a new legume for Oklahoma which it is thought might do well in the state. "Some of these things," says Tomlinson, "are new—although most of them are old but not widely used. I feel that we have laid the foundation and are now ready to really begin serious work on this phase of our state's cotton improvement program."

• **Farmers Show Keen Interest**—To illustrate how this program can be of vast and immediate benefit to farmers in the state, seven field days were held on the Ira Johnson farm from April 1 last year to the end of January this year. They were conducted by James Son, the county agent of Washita County, and Joe Evans, the senior veteran instructor at Dill. There was hardly a day after April 1 when one or several persons did not stop by Johnson's place to observe the work being done there, many coming from distances of 20 to 30 miles. Johnson's neighbors have watched his operations with great interest and are rapidly adopting the practices which are so successful on his farm.

"All of Mike's neighbors seeded their rye in the fall of 1948 without using fertilizer and they just didn't have any rye," Tomlinson tells us. "But last fall they used fertilizer and all had a beautiful cover in the cotton stalks." Most of them planned to use fertilizers on all their spring crops. Two of the gins at Dill and the one at Burns Flat steamed their cotton burs instead of burning them and none had a ton left. Johnson and his neighbors took them all.

The demonstration farms under Tomlinson's direction are located in 17 cotton-producing counties in the state and represent about every soil type found in those counties. The counties in which the farms are located produce about 90 percent of the cotton grown in the state and all the demonstration farms are upland farms except one in Grady County. The farms in the eastern part of the state are about average in productivity. Of the 14 located in central and western Oklahoma, four are above average in production, four are average and six are below average.

• **Diversification Is Good Insurance** — One of the most important objectives of the farm demonstration program is to encourage farmers to grow three or four crops instead of one, thus protecting their year's work should a crop be wiped out. A diversified farm program, in which cotton is the key crop, also enables the farmer to spread his own labor over a longer period during the year and keep himself and his hired help more fully employed.

• **Job for Ginner and Crusher**—Ginners and crushers have been assigned a definite place in Oklahoma's cotton improvement program. They are expected to aid the owners of the demonstration farms in every way they can, and help them keep accurate records that can be used to influence other farmers to adopt proved practices, old and new. The business men in the communities where the farms are located are kept fully advised of the results obtained and they are expected to join hands with ginners and crushers in influencing other farmers to adopt a more profitable farm program.

• **Laboratories for Complete Soil Analyses**—The rapid increase in the use of fertilizers in Oklahoma created a need for more complete soil analyses than could be obtained with the small chemi-

Over 135,000 Farmers in Texas Will See This Ad
VANISHING LABOR
in Texas Cotton Fields
ONLY YESTERDAY, the fields of Texas were invaded by an army of hand cotton pickers at harvest time. Today, a new "hand" is rapidly taking over, doing a faster, cleaner job at lower cost. It's the John Deere No. 15 Two-Row Cotton Harvester.
The John Deere harvests the crop at savings of $20 to $30 per bale over hand labor costs. It pays for itself in just a few days—pays for itself over and over again during its long life.
The John Deere Two-Row Cotton Harvester does an excellent job in any crop suitable for mechanical harvesting. The No. 15 strips two rows at a time after leaves have been removed by frost or defoliant. It does a once-over job saving more bolls than the average hand picker. Much of the dirt and trash is separated from the bolls. Cotton harvested with the John Deere grades as high as cotton hand-pulled at the same time.
Simple Design . . . Rugged Construction
Cotton plants are guided into the stripper units by wide gatherers. A stripper roll in each unit strips the cotton from the plants. Adjustable gauge wheels maintain the stripper units as proper height. Good visibility makes it easy to stay on the rows and save more bolls.
The John Deere is light in weight, yet has ample strength for extra years of service. All-steel construction . . . enclosed, heat-treated, steel-cut gears running in oil . . . and high-grade New Departure ball bearings are a few of the quality construction features of the No. 15.
See your John Deere dealer or write today for free folder.
JOHN DEERE PLOW COMPANY
DALLAS 2, TEXAS

Cotton growers in every section of Texas are being sold on the time-, money-, and labor-saving advantages of mechanical harvesting of cotton. The above advertisement covering the John Deere Two-Row Cotton Harvester is but one of a series which is appearing in various farm papers—ads that will go far in stimulating desire for the complete mechanization of cotton harvests.

JOHN DEERE • Moline, Illinois

cal kits long in use. Farmers, ginners and crushers made plans for the establishment of five or six complete soil laboratories in widely separated counties that would provide producers with accurate information about the chemical composition of their soil, the amount of potash present, and the percentage of organic matter.

The money for these laboratories was provided by industry and the farmers themselves, independent of the Oklahoma Cotton Research Foundation. The advantages of having complete facilities for making soil analyses became so quickly apparent that to date 55 of the 77 counties in the state have already made definite plans for laboratories. It is expected that before the end of the year practically every county in the state will have a laboratory with a trained technician in charge. The laboratories will be self-supporting, since a charge of 50 cents will be made for each soil sample tested. This is another example of how farmers and private industry in Oklahoma are attempting to solve their own problems in the traditional American way.

The 4-H Club Takes a Hand

• **Program for Boys and Girls**—Early in May of this year, Shawnee Brown, director, and Jra J. Hollar, state club leader of the Extension Service, announced details of a cotton improvement program for 4-H Club boys and girls that has the endorsement of all cotton interests in the state. There are cash awards totaling $3,000 awaiting winning 4-H boys, the fund being made available by the Oklahoma Cotton Ginners' Association, the Oklahoma Cottonseed Crushers' Association, and the Oklahoma State Cotton Exchange.

The program is open to any 4-H boy who is regularly enrolled in the 4-H Cotton Project and who plants a minimum of one acre of cotton. More advanced Club boys taking a part in the program are encouraged to plant a larger acreage. The boys will be well coached in all the better practices, including seed bed preparation, fertilization, cultivating, insect control, and harvesting.

The plan calls for a minimum of 2000 4-H Club projects in 1950, none of which will replace the demonstration plots to be supervised by the county agents, with the help of ginners and crushers, this year.

Objectives of the 4-H Club projects are (1) to emphasize the importance of proper land use, soil management, and moisture conservation in the production and marketing of cotton; (2) to enable 4-H Club boys to acquire more knowledge and develop skills in efficient and economical production practices; (3) to teach 4-H boys the market requirements of Oklahoma cotton and the market value of the various grades and staples; (4) to encourage a more extensive use of high-quality planting seed of adapted and recommended varieties; and (5) to recognize with appropriate awards those 4-H Club members who perform outstanding cotton improvement work.

The ginners and crushers associations and the Oklahoma State Cotton Exchange have provided cash awards totaling $1500 for 4-H Club girls in two contests they will participate in this year. The 4-H Cotton Clothing Team Demonstration Contest will help girls acquire the skills and knowledge necessary to plan, construct and care for suitable cotton clothing; to become aware of the economy of thoughtful planning, buying and care of cotton clothing; and to develop initiative and imagination that will enable them to use to the best advantage all available cotton material.

The 4-H Cotton Team Demonstration in House Furnishing will help girls acquire a knowledge of making the home more attractive and convenient through the use of cotton materials.

Problem Is a 2-in-1 Affair

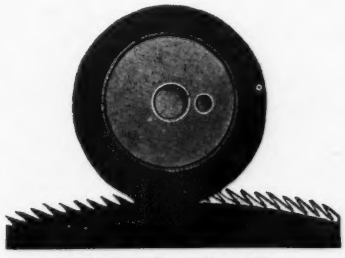
• **Mechanization and Better Production Practices**—The cotton problem in Oklahoma is not unlike that in most cotton states with respect to the need for a more highly mechanized production. It is admitted by everbody that cotton must mechanize if it is to continue as an important crop in this country. Otherwise it cannot compete with foreign cotton and the growing synthetic fiber industry that is rapidly moving ahead in the U.S.

But mechanization, important as it is, does not tell the grower when and how to plant. Improved dusting and spraying machines and modern insecticides with high killing power are essential, but they do not tell the grower how to use them and when to use them. Advanced spindle pickers and mechanical strippers are a "must" in our cotton production program, but they cannot harvest good cotton grown from poor seed, nor can they improve late-harvested lint and seed that have been weather-damaged.

• **Concurrent Programs Essential** — All

DOUBLECUT

Wood's Singlecut and Doublecut ROACH-BACK Gin Saw Gummers for All Machines.



Duplex Gin Saw Rotary Side Files for No. 14-X, No. 28-X, and No. 33

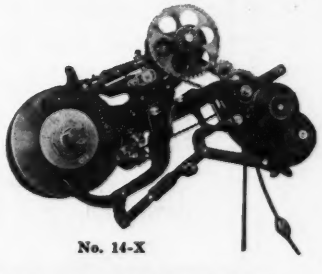
SINGLECUT

Wood's Singlecut and Doublecut STANDARD SHAPE Gin Saw Gummers for All Machines.

No. 33

For Best Results use Wood's Perfectly Designed "DUPLEX" Gummers and Straight Files for All Makes of Gin Saw Filing Machines.

Write for Circular and Price List Showing Our Complete Line



No. 14-X

THE A. A. WOOD & SONS COMPANY

MAKERS OF TOOLS & MACHINERY

436 Magnolia St. N.W. P. O. Box 937 Atlanta 1, Georgia

this means—and Oklahoma recognizes it as do other states—that there must be concurrent programs of mechanization and improved cotton production practices. Neither alone can accomplish what must be done to keep cotton profitable and competitive. But together they can maintain for cotton its place as the most important cash crop in the cotton-growing states, and it is on such a program that Oklahoma's cotton interests and its Experiment Station and Extension Service are pinning their hopes for a return to profitable cotton production.

No one is quicker to admit that Oklahoma desperately needs such a program than the men who are attacking cotton's problems in that state today.

The Patient Shows Improvement

• **Cotton Will Win** — When these men met solemnly at the bedside of their friend early in 1948 there seemed little hope for his survival. Today cotton's condition is not greatly improved, of course, for the program is still young—but the patient is at least able to sit up and take nourishment.

If the steps being taken to put cotton in Oklahoma back on its feet are successful—and they will be if the program is continued intelligently and energetically—the recovery will be no miracle of having raised the dead. More than anything else, it will be a case of having given the patient the right medicine at the right time.

Horace Hayden, Louis Hawkins, Shawnee Brown, and many other purposeful men in industry and at the A. & M. College have embarked on a long and difficult assignment for cotton in their state. Those who have seen their program at work, including the writer, are betting on them to put the old man back on his throne.

SUGAR BAG CLOTH
The Superior Covering For Your Cotton Bales
Your Choice of MENTE'S Three Nationally-known Registered Brands—
STAR—weighing about 1¾ lbs.
COMET—weighing about 1½ lbs.
DREADNAUGHT—weighing about 2 lbs.
Closely woven—made from clean, bright bags that have never been used for cotton before.
The Standard For Years!
The success of Sugar Bag Cloth for covering cotton has been definitely proven by the increased demand.
. . . . and when you think of BAGS, think of MENTE . . . . Burlap or cotton, new or used, printed or plain
Write, wire or phone our nearest office.
MENTE & CO., INC.
ISAAC T. RHEA, Pres.
Savannah · New Orleans · Houston

L. P. Brown, Former Oil Mill Executive, Dies

L. Palmer Brown, Jr., 65, former cottonseed oil mill executive, died in a Memphis, Tenn., hospital May 27 after a short illness. Funeral services were held at the home of his son, Palmer Brown III, in Memphis May 28, with burial in Forest Park.

An honorary member of the National Cottonseed Products Association and a member of the Society of the Old Guard, he had attended the Old Guard's thirty-second annual reunion May 16 during the association's convention in Houston, leaving by plane for Memphis the morning following the banquet. He entered the hospital May 19.

Born in Meridian, Miss., he moved to Memphis 32 years ago from Jackson, Tenn., and became general manager of the old American Cotton Oil Co. He later was vice-president of the old International Vegetable Oil Co., Inc., at Memphis, which operated cottonseed oil mills at Memphis and in Georgia, Mississippi and Texas. When the International went out of business he became president of the North Mississippi Oil Mill, Inc., at Coldwater, Miss. Four years ago he retired from the oil mill industry but retained other business interests in Memphis. He was vice-president of Industrial Supplies, Inc., machinery distributors, and Dobbs Houses, Inc., and a partner in L. P. Brown Co. at the time of his death.

A well known sportsman, clubman and churchman, he had served as president, vice-president and director of the Memphis Rotary Club and had twice headed the Industrial Division of the Memphis Chamber of Commerce.

Survivors include another son, Waldrup Brown, Memphis; a daughter, Kathryn Brown, Memphis; two brothers, Major J. C. Brown of Merced, Calif., and W. A. Brown, Memphis; and seven sisters, Mrs. Hadie Tate of Memphis, Mrs. Albert King of Nashville, Tenn., Mrs. Charles Ide of Toledo, Ohio, and Mrs. Mary Clare Lipscomb, Mrs. Robert Tew and Elizabeth Brown, all of Meridian.

Fire Damages 1,400 Tons of Seed at Lubbock Mill

A fire that broke out in the elevator in the top of a seed house at the Lubbock Cotton Oil Company, Lubbock, Texas, on the afternoon of May 30 caused relatively slight damage to the building and equipment and resulted in water damage to 1,400 tons of cottonseed. It is said the seed were not destroyed but will be dried out and worked as soon as possible. Geo. A. Simmons is manager of the Lubbock mill, a unit of the Simmons Mills with headquarters in Dallas.

• The average age of farmers is the highest in history. In 1945, over one farmer in three was more than 54 years old.

• Rats in the U.S. eat or destroy as much food each year as 265,000 farmers produce in the same period.

• *Management and Labor As Factors in*

Ginning Efficiency and Cost

By JOHN E. ROSS, Jr.

Agricultural Economist, Stoneville Laboratory, Research and Testing Division, U.S. Department of Agriculture, Stoneville, Mississippi

MANAGEMENT and labor exert a significant influence on the cost structure and efficiency of operation of the modern cotton gin. When gin plants are equipped with extensive amounts of complicated machinery, it becomes essential that all concerned know thoroughly the capabilities and limitations of this machinery and the operating practices most conducive to optimum performance as specified by the machinery manufacturers. Thus, the degree of success achieved in operating a business enterprise, which consists entirely of service, will be measured in terms of net bale value benefits to producers and economy of gin operation, both of which result in increased profits to the gin. Moreover, the degree of competition which exists in the ginning industry because of decreased cotton acreage on the one hand and the increased interest on the part of producers in ginning rates, in relation to prices for cotton and cottonseed, makes it even more important that efficient operation be achieved, if the industry is to be maintained on a sound financial basis.

During the last few years, cotton producers have enjoyed relatively good financial success as a result of high prices for cotton and cottonseed. Since ginning charges are usually paid from cottonseed returns, the relatively high prices paid for cottonseed in the past were sufficient to more than offset the added charges for ginning found to be essential in the operation of high priced, large ginning plants. However, with the present decrease in cottonseed prices, it is unlikely that producers will realize appreciable net returns from the sale of cottonseed after paying relatively high ginning charges when compared with those of former years.

The responsibilities arising from the management of the present day modern gin are many and varied. Not only must management be thoroughly familiar with the engineering principles involved in the construction and operation of the machinery used, but also well versed in the technology of ginning and its effect on the spinning qualities of the cotton. The gin management should be familiar with cost accounting procedures and be able to take advantage of any practices that will result in decreased cost of operation consistent with satisfactory quality of ginning services. Also, management must effectively select and supervise a labor force to operate the plant efficiently.

Another job in which gin management must assume a leading role in the years to come is in the field of public relations. During the rapid trend toward rough harvesting practices, producers have relied almost entirely on the gin to produce a quality product. Thus, gin management is forced to bear the brunt of responsibility for producing quality cotton, knowing full well that to follow practices such as applying excessive amounts of heat or utilizing excessive overhead cleaning machinery will probably result in a slightly better grade but will irreparably damage the fiber and spinning properties of this cotton. The growing practice of processing cotton through gins in less time than that which is specified by gin machinery manufacturers adds to the probability of damage to the fiber. Inevitably these practices result in penalties to the producer who condones or even insists on such operating practices, for they result in a lessening of demand for his cotton by the mills because of the adverse effect on spinning quality. Thus, gin management, being placed in such a strategic position, should take the lead in any educational program to acquaint producers with the probable effects of malpractices of gin operation and the relation of quaiity of

(Continued on Page 62)

FACT..
for Advertisers:

This publication works only for gin and oil mill men. It is the exclusive publication of these processing branches of the cotton industry, edited only for the men who use your product in their operations.

A New Oilseed Crop for the South

(Continued from Page 12)

trolytically precipitated nickel hydroxide]. Micropenetration values indicated that the hardened fat reached shortening consistency when the iodine value attained approximately 69.

Stability

One of the most significant properties of sesame oil is its remarkable stability or resistance to oxidative rancidity which has been observed and remarked upon by various investigators. The crude oils from the three American-grown varieties had stabilities ranging from 19 to 33 hours by the Active Oxygen Method. Alkali refining caused a decrease in stability to 9.5 to 20 hours while bleaching with AOCS official bleaching clay increased the stability to 14.5 to 32 hours. Deodorization reduced the stability again to 8.5 to 11 hours. Hydrogenation to shortening consistency on the other hand resulted in a tremendous increase in stability, namely, to 560 to 720 hours. Deodorization of the hardened fat resulted in a decrease in stability, but only to 380 to 491 hours. The hardened oil from the Nicaraguan seed had a stability of 840 hours which was reduced to 544 hours after deodorization.

Most soft oils exhibit some changes in stability as a result of various processing operations, but none of them undergo the marked changes exhibited by sesame oil. These changes in stability have been shown by Budowski, Menezes, and Dollear (6) to be associated with a unique antioxidant, known as sesamol, which is present in sesame oil. This antioxidant is derived from another compound, sesamolin, which is present in sesame oil to the extent of 0.3 to 0.5 percent.

Budowski and coworkers (5-6) have shown that sesamolin is converted, in part, to sesamol by bleaching with certain types of clays and carbons and by hydrogenation and that sesamol is removed from sesame oil by alkali refining and deodorization. These changes in the content of sesamol account for the observed differences in stability of sesame oils at different stages of processing.

Sesamin

Besides sesamolin and sesamol, which latter is derived from sesamolin, crude sesame oil contains 0.5 to 1 percent of another compound called sesamin. This compound is relatively inert chemically, but it exerts a remarkable synergistic effect with pyrethrin insecticides. For example, in a test against houseflies, a solution of 0.2 percent sesamin in refined kerosene killed only four percent of the flies. A solution of 0.05 percent of pyrethrin in refined kerosene killed 19 percent of the flies, whereas a mixture of the two in the same concentrations killed 84 percent of the flies (10).

Because of this synergistic effect, sesame oil or a concentrate of sesamin prepared from the crude oil is used in many pyrethrin sprays. During World War II, 40 million one-pound, pyrethrum liquefied-gas aerosol bombs were used by the armed forces. The original formula called for two percent of sesame oil and later this was increased to eight percent (10).

Later, a simple process was developed to produce sesamin concentrates which are now made on a large scale and extensively used in place of sesame oil itself. Removal of the sesamin from crude sesame oil also removes small amounts of other impurities which would normally have to be removed in the refining process. Removal of the sesamin apparently has little effect on the stability of the finished oil.

TABLE 7
DATA ON REFINING AND BLEACHING TESTS

Characteristic	SO-1	SO-2	SO-3	SO-4
Free fatty acids (as oleic), %	0.5	1.8	1.5	2.0
Refining loss, %	1.4	4.5	4.4	4.7
Color refined oil, Lovibond Y/R	35/1.2	35/1.6	35/0.6	20/1.2
Color bleached oil, 5.5% AOCS earth	1/0.5	1/0.5	2/0.4	3/0.6

Summary

Sesame is one of the two oldest oilseed crops cultivated by man. In subtropical and tropical climates, on good land, and under proper conditions of cultivation, sesame yields approximately 800 pounds of seed per acre.

The seed contains approximately 50 percent oil and 20 to 25 percent protein. It is free flowing and stores well for long periods of time even in tropical climates.

It requires no decortication or preparation other than cleaning prior to milling into oil and meal. It is readily processed by conventional oil milling equipment including hydraulic and continuous screw presses and by forepressing and solvent extraction.

The meal, which contains 50 to 55 percent protein, is a good stockfeed and is especially high in methionine which is especially low in soybean meal, hence a mixture of sesame and soybean meals is superior to either one alone.

The crude oil is very light in color and in this respect resembles refined cottonseed or peanut oil. It is low in free fatty acids — generally, less than two percent even when produced from seed stored for a year or more. It is readily refined and bleaches to a nearly water white oil by conventional methods. It is readily hydrogenated by conventional methods to yield a hardened fat of shortening consistency.

The oil varies in stability at different stages of processing, but the stability is generally as high or higher than other soft or yellow oils. After hydrogenation to shortening consistency, it exhibits extremely high stability, for example, 560 to 840 AOM hours before deodorization and 380 to 544 AOM hours after deodorization.

The variation in the stability of sesame oil at different stages of processing has been found to be correlated with its content of sesamol, a compound which is formed from sesamolin, another constituent of sesame oil. Sesamol is removed from the oil by alkali refining and deodorization and regenerated from sesamolin by bleaching with certain clays and carbons and by hydrogenation.

Crude sesame oil also contains a compound called sesamin which is itself relatively inert chemically, but acts as a powerful synergist in increasing the ef-

CUT SEED LOADING TIME

• With Porta-loader, One Truck does work of Two!

Save hours in loading time and labor with Boardman's Porta-loader (portable loader). It's made of strong aluminum alloy, with exclusive patented no-slip conveyor belt! Send for free Porta-loader folder now.

THE BOARDMAN CO.

P. O. Box 1152 - - Oklahoma City, Okla.

fectiveness of pyrethrin as an insecticide.

From the standpoint of ease of processing and utility as a food fat, sesame oil possesses many advantages in comparison to other common vegetable oils.

Literature Cited

1. Proceedings of the First International Sesame Conference, Clemson Agricultural Colloge, Clemson, South Carolina.
2. V. Andraos, C. E. Swift, and F. G. Dollear, Sesame Oil. I. Properties of Solvent-Extracted Sesame Oil. J. Am. Oil Chem. Soc., *47*, 31-35 (1950).
3. F. G. T. Menezes, P. Budowski, and F. G. Dollear, Sesame Oil. II. Some Chemical and Physical Properties of the Oils from Different Varieties of Sesame Seed. J. Am. Oil Chem. Soc. (In press).
4. P. Budowski, Sesame Oil. III. Antioxidant Properties of Sesamol. J. Am. Oil Chem. Soc. (In press).
5. P. Budowski, R. T. O'Connor, and E. T. Field, Sesame Oil. IV. Determination of Free and Bound Sesamol. J. Am. Oil Chem. Soc. (In press).
6. P. Budowski, F. G. T. Menezes, and F. G. Dollear, Sesame Oil. V. The Stability of Sesame Oil. J. Am. Oil Chem. Soc. (In press).
7. Report of the FAO Oilseed Mission for Venezuela, Food and Agriculture Organization of the United Nations, Washington, 1949.
8. Report of the FAO Oilseed Survey for Guatemala, Food and Agriculture Organization of the United Nations, Washington. (In press).
9. A. E. Bailey, *Cottonseed and Cottonseed Products, Their Chemistry and Chemical Composition.* Interscience, New York (1948), p. 374.
10. R. C. Roark, Some Promising Insecticidal Plants. Economic Botany, *1*, 437-445 (1947).

Rio Grande Valley Ginners Meet June 13 at McAllen

A meeting of Rio Grande Valley ginners will be held at Whalen Park in McAllen on Tuesday, June 13, Jay C. Stilley, executive vice-president of the Texas Cotton Ginners' Association, has announced. This is the first of 23 such meetings to be held over the state prior to the opening of the ginning season. The McAllen meeting will begin at 3 p.m. and end at 6 p.m.

A number of speakers are scheduled for the meeting, including C. B. Ray, Mercedes; and Douglas Carroll, Harlingen, reporting on the cottonseed situation. Stilley will report on state and national affairs as they affect Rio Grande Valley ginners. Cleve Tandy, Los Fresnos, a director of the Association, will conduct a discussion period following the talks.

Refreshments and barbecue dinner will be furnished ginners and guests by Brazos Valley Cotton Oil Mill, Raymondville Cotton Oil Co., South Texas Cotton Oil Co., Swift & Company Oil Mill, and Valley Cooperative Oil Mill. Jack Lomax, San Benito, is in charge of arrangements for the meeting and the barbecue; H. Q. Sharp, Mercedes, will be in charge of registration.

• The U.S. is losing two hundred 40-acre farms (8,000 acres) a day through erosion.

6 CHEMICAL LABORATORIES TO SERVE YOU

★ Memphis, Tenn.
★ Little Rock, Ark.
★ Blytheville, Ark.
★ Cairo, Ill.
★ Des Moines, Iowa
★ Decatur, Ill.

WOODSON-TENENT LABORATORIES
Main Offices: MEMPHIS, TENN.
Specializing in analyses of Cottonseed, Soybeans and their products, Fats — Feeds — Fertilizers

THE *Finest* TELESCOPE EVER BUILT!

Runs on track—unloads long trucks or trailers without moving up.

Easy to Operate
Bronze Oil-Lite Bearings Throughout
Sturdy Construction
A Real Labor Saver

The STACY COMPANY, Inc.
2704 TAYLOR ST. DALLAS 1, TEXAS

ED. M. BAYLISS, Jr.
President

Telephone:
BOwling Green 9-7104

FIBRE-SERVICE, INC.

29 Broadway New York 6, N. Y.

MERCHANTS

COTTON LINTERS

Members: National Cottonseed Products Association
American Cotton Linter Association
Cotton Importers Association

Ginning Efficiency and Cost

(Continued from Page 59)

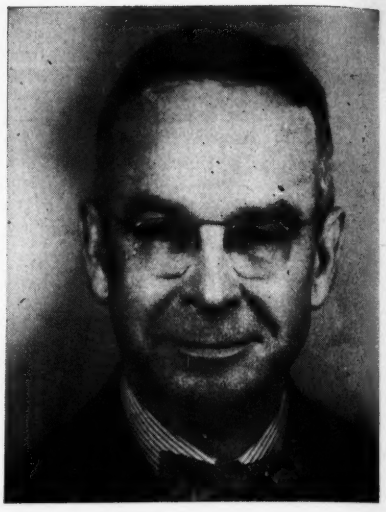
cotton brought to the gin, and the lint produced therefrom.

Obviously, the cost involved in obtaining management having the qualities desired to operate the present day ginning enterprise will be significantly higher in many parts of the Cotton Belt than in former years. However, such an increase in the cost of management is only logical in view of the growth of the enterprise itself and the type of personnel which will be essential for its successful operation. It is not uncommon for management to receive wages amounting to 75 cents to $1 per bale ginned plus other financial inducements such as bonus arrangements and adequate living quarters at some of the larger elaborately equipped gins of the Southwest and Far West. With the relatively large volumes required to be assured of financial success, this means that the cost of good management per gin will be a most significant item in the total cost structure. It might be added that salaries paid for bookkeepers and weighers add to this total, amounting to as much as 50 cents per bale in some instances.

An efficient manager can, in many instances, prevent economic losses that will exceed the salary paid him. For instance, the loss in weight per bale resulting from excessive drying frequently amounts to more than $1 per bale for the producer, in addition to the cost to the ginner for fuel consumed for drier operations.

During the past several years, labor requirements and costs have increased steadily, brought about largely by the trend toward larger centralized plants and a rising wage level. Obviously, the newly enacted minimum wage law will have a pronounced tendency toward increasing the cost of labor, particularly in those areas where the 75 cents per hour minimum has not yet been attained. However, such an increase in labor costs will not all be on the minus side, for many ginners are confident that more efficient labor can be secured at the new minimum wage. Thus, savings may be achieved through less frequent chokages and breakdowns and by probable reductions in man-hour requirements per bale through decreases in the number employed in the labor force. It has been generally found that an increase in volume results in additional labor being employed, principally as additional yard workers and office help. In some areas it has been found that the cost of labor equals or exceeds the total fixed items of expense including management and constitutes approximately one-fourth to one-third of total ginning costs. Labor requirements range from less than 2.5 man-hours per bale to over 3.5 man-hours. It would be well for management to examine their operations closely to determine if greater efficiency could be obtained with a reduced labor force, particularly at those gins having greater than average volumes.

• More than 50 percent of the entire American population derives its income from producing, processing, handling, transporting and distributing food. About 80 percent of all these people work with animal food products.



Honorary 4-H Club Member

AT A CEREMONY following the Oklahoma 4-H Club Roundup at Stillwater June 1, Horace Hayden (above) of Oklahoma City was made an honorary member of the state's 4-H Clubs. Hayden is secretary-treasurer of the Oklahoma ginners and crushers associations, which for many years have given strong support to 4-H Club activities.

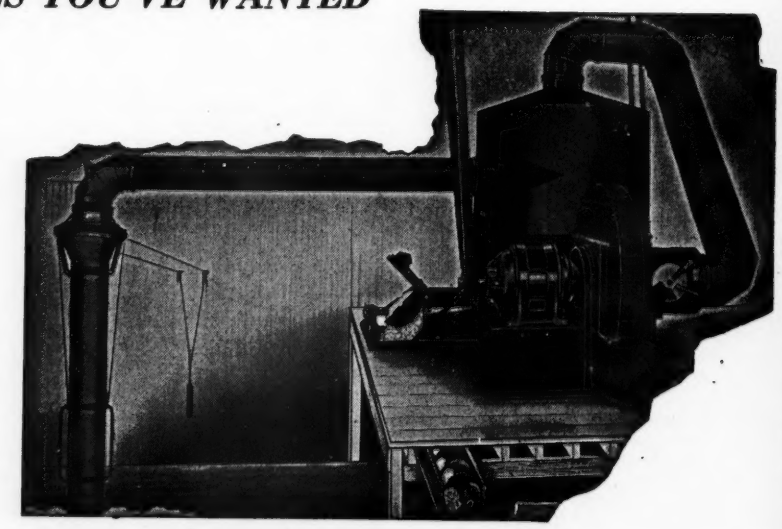
• A count of the Bureau of Agricultural Economics has revealed that at least two-thirds of American farm homes still are without running water.

PHELPS PNEUMATIC STANDARD UNLOADER

ALL THE FEATURES YOU'VE WANTED

- SPEED
- SAFETY
- CLEANLINESS
- LOW FIRST COST
- LOW OPERATING COST
- LOW UPKEEP
- CREATES GOOD WILL
- SAVES LABOR

Here's an unloader that means real savings. Its Patented Control valve does away with all wasted power . . . unloading is accomplished quicker with a minimum of power. Simplified construction and countless improvements mean dollars saved in repair, unkeep and labor.



HUBERT PHELPS MACHINERY COMPANY

Box 1093 **LITTLE ROCK, ARKANSAS** **Phone 2-1314**

Mechanization Meeting Speakers Announced

Addresses by eight topflight leaders of agriculture and industry will highlight the three-day Beltwide Cotton Mechanization Conference at Greenville and Stoneville, Miss., July 13-15, Claude L. Welch, National Cotton Council production and marketing director, has announced.

Following an address of welcome by Dr. Fred T. Mitchell, president of Mississippi State College, and a statement of conference goals by Cotton Council President Harold A. Young on the opening day of the meeting, E. D. White, Washington, cotton assistant to the Secretary of Agriculture, will tell the 600 conferees of the cotton situation at home and abroad.

Dr. Frank J. Welch, dean and director of agriculture, Mississippi State College, will give an economic analysis of progress and problems in cotton mechanization. The contribution of the farm equipment industry to southern agriculture will be explained by H. H. Bloom, Racine, Wis., executive vice-president of the Massey-Harris Co.

Principal speaker at the conference banquet will be Ed Lipscomb, director of public relations and sales promotion of the National Cotton Council. He will be presented to delegates by Theodore Johnson, Racine, Wis., president of J. I. Case Co.

Other key addresses of the meeting will be delivered by James W. Hand, Jr., Rolling Fork, Miss., Delta planter, and P. H. Noland, Louisville, Ky., president, B. F. Avery & Sons Co. Mr. Hand will speak on "Facing Cotton's Future Realistically," while Mr. Noland will conclude the meeting with a summation of conference achievements.

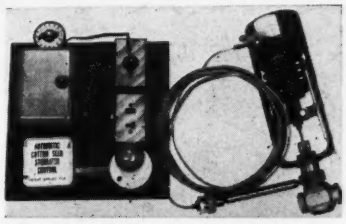
Chemical weed control, which one day may eliminate as many as six to 11 cultivations a year, will receive special emphasis at the conference. Under consideration will be research done on chemical weed control during pre-planting, pre-emergence and post-emergence stages of the crop.

"Much progress has been made in the development of suitable chemicals to control weeds in cotton fields," said Harold A. Young, Council President and conference chairman. "At the Delta Branch Experiment Station at Stoneville tests have been run on more than 200 different petroleum fractions and 30 other types of herbicidal agents. Successful control attained in these experiments has resulted in definite recommendations for use of chemicals during the post-emergence period."

The Cotton Council leader said that further research is essential before any recommendations can be made on use of chemicals to control weeds prior to the time the cotton plant emerges from the soil.

The problem of improving qualities of mechanically harvested cotton to meet mill requirements will also get full consideration at the conference. Both the ginning and spinning mill aspects of the problem will be discussed, Welch said.

"Both the ginner and the spinner have long anticipated widespread mechanical harvesting," Welch declared. "Gin machinery manufacturers, with the aid of federal research laboratories, have de-



SAVE!

FUEL • LABOR • SEED

The Cottonseed Sterilizer Control that will AUTOMATICALLY cut off the heat as seed flow diminishes, and turn it on again when seed passes into conveyor.

Reduces temperature chart variation.

Can be used with LP Gas, Natural Gas or Steam.

For Information Write—

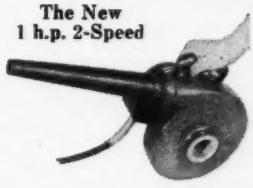
FEDERAL BUTANE CO.

P. O. Box 344 Harlingen, Texas

Serving the Rio Grande Valley with LP Gas and Tanks—the finest in lubricants—and skilled engineers to handle any burner failure or fuel problems.

TRY IT—FREE

The New 1 h.p. 2-Speed



ACE GIN BLOWER

To prove that the ACE Gin Blower

Cleans faster and better
Reduces fire hazards
Prevents overheating
Saves time and labor

We will send one for FREE TRIAL.

Write for details. No obligation.

The Ace Co.

114 W. Washington St., Ocala, Fla.

GIN AND OIL MILL

MACHINERY & SUPPLIES

COMPLETE STOCKS OF SCALES, FANS, ENGINES, MOTORS, TOOLS, TRANSMISSION EQUIPMENT, ETC. • MACHINE SHOP SERVICE.

ALAMO IRON WORKS

San Antonio • Corpus Christi • Brownsville • San Angelo • Houston

IT'S A PROUD MAN WHO SELLS

WATSON'S

• WATSON BIG BOLL
• NEW ROWDEN COTTON
• STONEVILLE 62 COTTON

THESE VARIETIES MAY BE HAD IN DELINTED SEED

•

WATSON'S HYBRID SEED CORN

The fastest selling seed in Southwest, more profits for you!

FERRIS WATSON SEED CO.

STATE REGISTERED PLANT BREEDERS

GARLAND (DALLAS COUNTY), TEXAS

veloped new cleaning equipment which is already being used by ginners in some sections of the Belt.

"There has been gradual improvement in the cleaning systems at the cotton mills. Over a period of years, mills have adapted themselves to a gradual decrease in grades of cotton. These decreases, in part at least, have been due to hand snapping and rough picking.

"Currently, however," Welch continued, "there is debate as to whether cleaning should be concentrated in the gins or at the mill level of processing. It is hoped that discussions at the mechanization conference will aid in clarifying the entire cleaning situation."

USDA Studying Factors Affecting U. S. Cotton

From the very beginning of cotton growing in the U.S., back in the 1700's, foreign markets have been important to U.S. growers. In the 1830's, four out of five bales went overseas; 100 years later, one out of two. But two world wars have jeopardized the important position the U.S. held in the world cotton trade; and the cotton states are growing ever more concerned over developments that affect their foreign markets—exchange problems, enforced use of synthetic textiles, and extension of cotton growing into new areas. The U.S. Department of Agriculture, under the Research and Marketing Act, has sent cotton specialists to Western Europe, the Orient, and the producing areas of the Southern Hemisphere to survey these developments and to arm the domestic industry with facts and understanding.

Tupelo, Miss., Mill Wins Safety Award

A RECORD 444 days without an accident won for Tupelo Oil & Gin Co., Tupelo, Miss., a safety achievement plaque from the U.S. Fidelity and Guaranty Co. The mill piled up a total of 111,027 man hours of work without a lost-time accident during the period. U. S. F. & G. officials said this is the first time a Mississippi oil mill has won the award, and attributed the safety achievement to good management plus cooperation of the insuring company's safety engineers. Shown above during the award ceremony are, left to right: Otis Gillentine, mill superintendent; J. A. Strain, secretary-treasurer; L. F. Scott, U. S. F. & G. safety engineer; J. H. Adams, cashier; J. R. (Zook) Strain, president and general manager of the Tupelo mill; Charlie Fitts, U. S. F. & G. special agent; and C. C. Strain, U. S. F. & G. agent in Tupelo.

IF YOU ARE HAVING TROUBLE
MANUFACTURING A GOOD GRADE OF LINT . . .

Why Not Let Industrial Machinery Assist You with Your Problems?

WE HAVE THE ANSWERS!

Industrial Machinery Co., Inc.

P. O. Box 1259
2300 South Main St.
The Home of Conveyors
Telephone 9-8441
Fort Worth, Texas

Southland Acquires Dallas Feed Mill

Jas. R. Gill announces purchase of Lawther-Meadows Mill June 3. Will operate as Southland Feed Mills.

Purchase of the Lawther-Meadows Mill, 5225 Maple Avenue, Dallas, by the Southland Cotton Oil Company was announced June 3 by Jas. R. Gill, vice-president and general manager of the Southland firm, which has headquarters in Paris, Texas.

Monroe May, who has been manager of the feed department of Southland at Waxahachie, will manage the Dallas plant, assisted by Jack Walraven, also formerly of Waxahachie. Mr. May is a graduate of Texas A. & M. College and was with the Texas Extension Service as assistant county agent in Ellis and Lubbock counties, and county agent in Castro and Lamar counties before joining the Southland organization several years ago. He is a member of the City Council and mayor pro-tem of Waxahachie.

E. B. Royce, associated with the Lawther organization for 28 years, will be sales manager for the Southland Feed Mills here, with Bill Steger, also from the Lawther organization, as assistant.

Mr. Gill announced that the Dallas plant will operate as the Southland Feed Mills, the formula feed division of the Southland Cotton Oil Company. It will continue to manufacture and distribute "Queen of Dixie" and "Sure Nuff" feeds, formerly sold by the Lawther-Meadows Mill and among the oldest and most widely-known Texas formula feeds. The Dallas property also will be headquarters for Southland's "Sunny Southland" feeds and cottonseed cake grinding and marketing.

"We are highly pleased at the opportunity of continuing to serve the customers of this pioneer Texas firm, as well as of making this Dallas plant a distributing center for Southland products which go to ranchmen and farmers throughout the Southwest and Western range states as far away as Montana," he commented.

Mr. Gill said the Southland will transfer to Dallas its operations at the Burrus Feed Mills at McKinney, which the firm has had under lease since April following a fire at the Waxahachie plant.

In addition to the new Dallas plant, Southland Cotton Oil Company operates cottonseed crushing mills at Paris, Waxahachie, Temple, Corsicana and Cameron, Texas; Oklahoma City and Wynnewood, Okla.; Shreveport, La.; and Jackson, Miss.

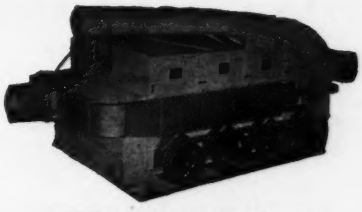
Ernest D. Black Recovers

Ernest D. Black, vice-president and manager of the Central Cotton Oil Co. at Macon, Ga., has recovered from an allergic illness which hospitalized him while he was attending the Houston convention of the National Cottonseed Products Association last month. His many friends will be glad to know that he has returned home and is back on the job.

HINCKLEY

Gin Supply Co., 4008 Commerce
Dallas 1, Texas

A Hinckley Drier-Cleaner makes a smooth, clean sample. It blows the fine pin trash out. It increases your turn-out.



72-D Hinckley Drier-Cleaner

HINCKLEY GIN SUPPLY COMPANY
4008 Commerce St. Dallas 1, Texas

MODERN STEEL STORAGE
All-Steel Self-Filling Non-Combustible
BUILDINGS
For—
• COTTON SEED
• SOY BEANS
• PEANUTS
Designed, Fabricated and Erected
Confer with us on your storage problems
MUSKOGEE IRON WORKS
Muskogee, Oklahoma

SOUTHERN STAR
RIVERSIDE MILLS
AUGUSTA, GA.
Ginners Know the Protection of the famous Riverside brand of bagging which is Durable—Economical and Uniform—full 2 lbs. to the yard.
Prompt Service from convenient warehouse stocks.
Write us or our nearest agent.
Robert Burgher, Dallas, Texas
Bolton Bagging Co., Memphis, Tenn.
Sam A. Sanders, Little Rock, Ark.
Mason Jackson Co., Shreveport, La.
X-CEL

CALENDAR

Conventions • Meetings • Events

• June 11-13—Texas Cottonseed Crushers' Association annual convention. Plaza Hotel, San Antonio, Texas. Jack Whetstone, 624 Wilson Bldg., Dallas 1, Texas, secretary.

• June 15-16 — Mississippi Cottonseed Crushers Association annual convention. Hotel Buena Vista, Biloxi, Miss. J. A. Rogers, P. O. Box 3581, West Jackson Sta., Jackson, Miss., secretary.

• June 15-16-17—National Oil Mill Superintendents' Association annual convention. Adolphus Hotel, Dallas, Texas. H. E. Wilson, Peoples Cotton Oil Co., Wharton, Texas, secretary-treasurer.

• June 19-20 — North Carolina Cottonseed Crushers Association and South Carolina Cotton Seed Crushers' Association joint convention. Ocean Forest Hotel, Myrtle Beach, S. C.

• July 13-14-15—Fourth annual Beltwide Cotton Mechanization Conference. Stoneville and Greenville, Miss. For additional information, write the National Cotton Council, P. O. Box 18, Memphis, Tenn., sponsor of the conference.

• July 27-28—Cotton Research Congress, eleventh annual meeting. Baker Hotel, Dallas, Texas. Sponsor: State-Wide Cotton Committee of Texas, Burris C. Jackson, Hillsboro, Texas, chairman.

• Aug. 28-29-30—American Soybean Association annual convention. Springfield Armory, Springfield, Ill. George M. Strayer, Hudson, Iowa, secretary-treasurer.

• Sept. 11-12-13—Spinner-Breeder Conference and Southern Combed Yarn Spinners Association joint meeting. El Paso,

• September 18-19-20 — Second International Sesame Conference. Maracay, Venezuela. For additional information, write Dr. D. G. Langham, Head, Department of Agronomy and Genetics, Vene-

• Sept. 27-28-29-30—Third annual National Soybean Festival, Portageville, Mo. For further information write Joseph A. Delta Council, Stoneville, Miss., sponsor of the Conference.

• January 22-23-24, 1951—National Cotton Council annual meeting. Hotel Buena Vista, Biloxi, Miss. Wm. Rhea Blake, P. O. Box 18, Memphis 1, Tenn., executive vice-president-secretary.

Stauffer CHEMICALS SINCE 1885

COTTON INSECTICIDES

STAUFFER COTTON DUST NO. 122
Contains 3% Gamma BHC - 5% DDT - 57% Sulphur

STAUFFER COTTON DUST NO. 82
Contains 20% Toxaphene and 40% Sulphur

STAUFFER COTTON DUST NO. 22
Contains 5% DDT and 82% Sulphur

STAUFFER COTTON DUST NO. 22-1
Contains 10% DDT and 75% Sulphur

STAUFFER COTTON DUST NO. 82-1
Contains 10% Toxaphene and 40% Sulphur

STAUFFER COTTON DUST NO. 122-6
Contains 10% DDT, 2% Gamma BHC and 50% Sulphur

"PERFECTION"
A 325-mesh, free-flowing, non-lumping dusting sulphur

STAUFFER EMULSIFIABLE CONCENTRATES
(DDT - Toxaphene - Chlordane)

STAUFFER CHEMICAL CO.
M & M Building, Houston, Texas
Weslaco, Texas
PLANTS:
Freeport, Tex. • Weslaco, Tex.

K. S. Markley Gets USDA Superior Service Award

For notable expansion of knowledge about the chemistry and technology of fats, oils, and oilseeds, Dr. K. S. Markley of the Southern Regional Research Laboratory has received a superior service award from the Department of Agriculture. Presentation was in Washington May 25. Dr. Markley is an outstanding scientist, author, and administrator, whose work has led to more efficient utilization of both the domestic and world supply of fats, oils, and oilseeds.

As head of the Laboratory's Oil and Oilseed Division he has directed research resulting in 156 articles and seven patents. These cover improved methods of processing and using cottonseed, peanut, and rice bran oils, and also provide considerable fundamental knowledge of the properties and utility of sesame, safflower, and okraseed oils.

In addition, Dr. Markley is personally the author or co-author of 50 articles and two books on the chemistry and technology of fats, oils, oilseeds, and waxes. He has conducted two special oilseed surveys for the Food and Agriculture Organization of United Nations —one in Venezuela in 1948 and one in Guatemala in 1949—and has participated in a number of other investigations abroad.

Besides his official activities Dr. Markley has contributed generously to the work of several professional organizations for the advancement of knowledge on fats, oils, and oilseeds. He has been a member of the Editorial Advisory Board of the American Oil Chemists' Society since 1939 and has also served on the Membership Committee, the Refining Committee, and the Committee on Analysis of Commercial Fats and Oils. He was president of the Society in 1944-45. He is an active member of the American Chemical Society, the New Orleans Academy of Sciences, the American Association for the Advancement of Science, and several professional and honorary fraternities.

• Until we've located our own mug in a group picture, nobody else's face interests us.

for EXTRA tough jobs . . . use

FLEXOTYPE CRIMPS

. . . They are made from choice leather specially tanned to prevent deterioration when not in use. Each crimp is moulded into shape.

. . . Although both the outside and the re-inforcing filler are of solid leather, Flexotype Crimps are flexible requiring no softening, and are ready for immediate installation.

Use Flexotype Crimps for a perfect pressure seal. No leakage. No power loss. Your mill supply dealer has them, or write to

ALEXANDER BROTHERS
Leather Belting and Industrial Leathers since 1867
406 N. 3rd Street, Phila. 23, Pa.
Branches: Charlotte, Chicago New York, Dallas

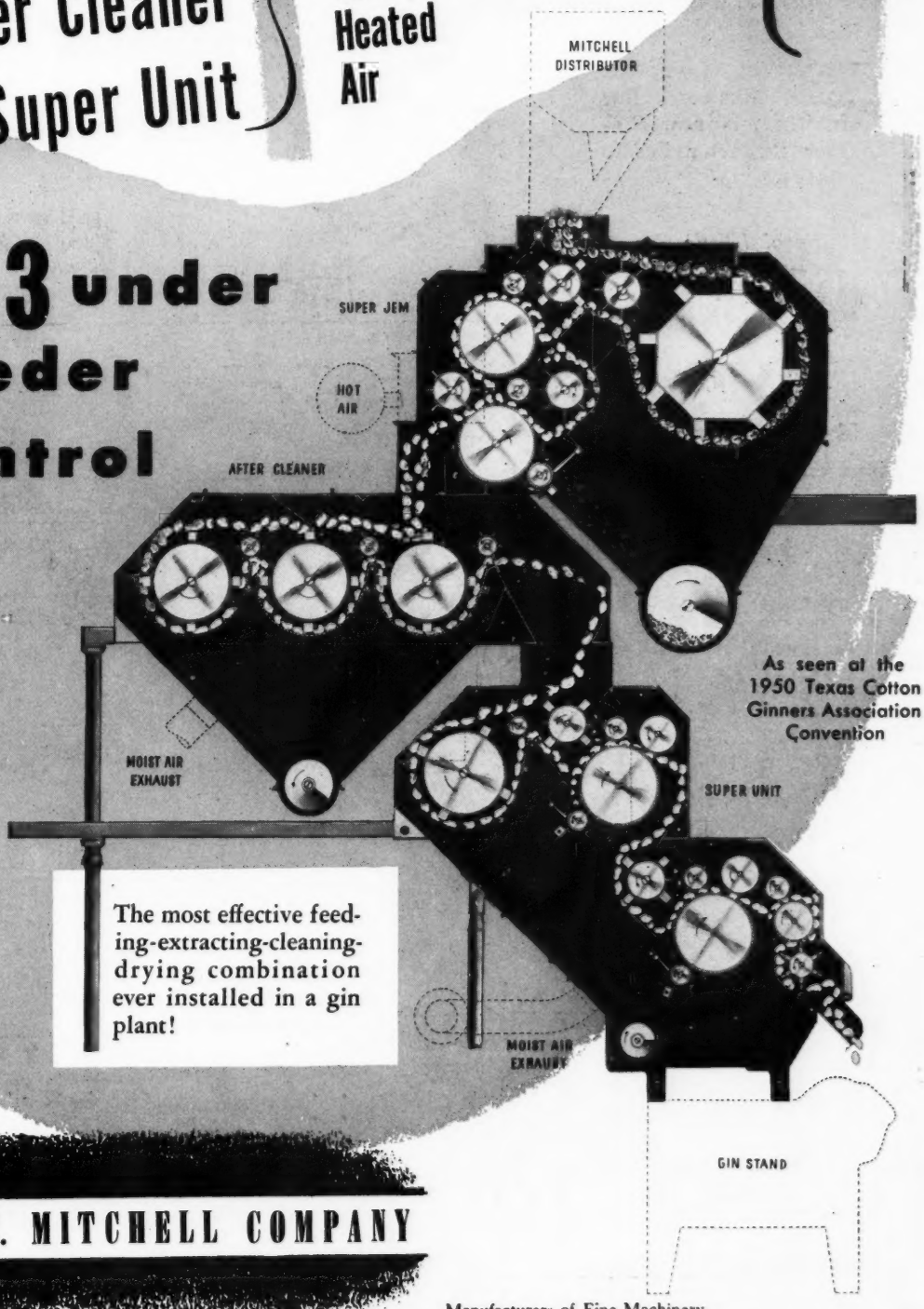
MITCHELL

Super JEM After Cleaner Super Unit

33 All Steel Cylinders
87 Sq. Ft. of Screen Surface
3 Hull Discharges
48 Ft. of Cotton Travel in Heated Air

Per stand

all 3 under Feeder Control



As seen at the 1950 Texas Cotton Ginners Association Convention

The most effective feeding-extracting-cleaning-drying combination ever installed in a gin plant!

JOHN E. MITCHELL COMPANY

3800 COMMERCE STREET DALLAS, TEXAS

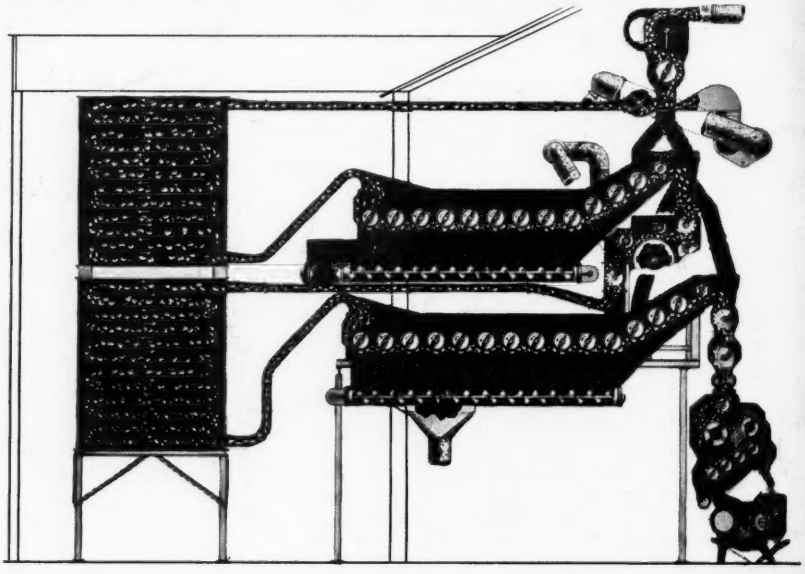
Manufacturers of Fine Machinery for More Than *Forty-five Years*

HARDWICKE-ETTER COMPANY

TYPE G
COMPLETE
DOUBLE DRYING
AND CLEANING

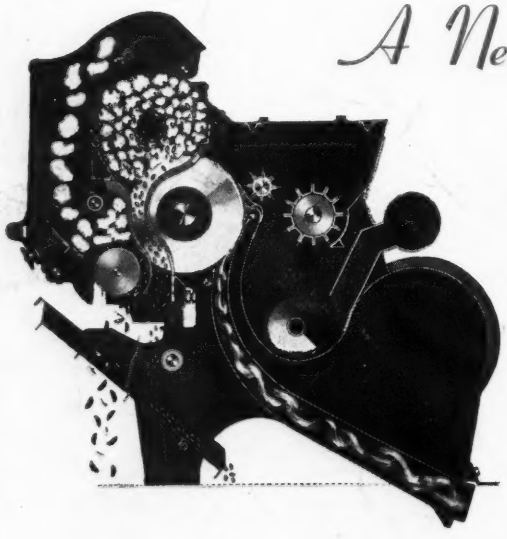
Illustration shown with:
Flat Screen Separator. Type I Cleaners, Bur Machine, Hardwicke-Etter Extractor Feeder and Gin.

Special Bulletin Sent on Request.



HARDWICKE-ETTER COMPANY

Manufacturers **Sherman, Texas**



A New Double Feature

FIRST: A NEW 90 SAW GIN for increased capacity. Designed with same spacing for Saws and Ribs, making Roll Box approximately 7″ longer than our 80 Saw Gin, but Gins set on same centers and take same building space. Built in either Up or Down Draft Type.

SECOND: A NEW SUPER MOTING DEVICE, consisting of a Grid or Stripper Bar, a revolving rubber-flight wiping or cleaning Roller, and a second rubber-flight Roller located to the rear of the cleaning Roller, with edges of these two Rollers forming a Mote Suction Duct with self cleaning surfaces.

This combination device REMOVES and KEEPS a MUCH GREATER Volume of motes and trash OUT OF LINT STREAM, and definitely improves the sample.

Manufactured by

THE MURRAY COMPANY OF TEXAS INC.

DALLAS • MEMPHIS • ATLANTA